

DR. RAJENDRA PRASAD CENTRE FOR OPHTHALMIC SCIENCES
ALL INDIA INSTITUTE OF MEDICAL SCIENCES
Ansari Nagar, New Delhi – 110029

NOTICE INVITING TENDER

Stores Officer, Dr. R.P. Centre on behalf of Director AIIMS invites sealed tenders in two bid systems from the reputed firms/manufacturers for the purchase of following items up to 4.30P.M on or before 25/10/2012 :-

File No.	Name of equipment	Tender Fee	EMD
1/U-1&2/RPC/SSK/12-13	90D Lenses – 6 Nos.	500/-	12000/-
2/U-1&2/RPC/SSK/12-13	28D Lenses- 6 Nos.	500/-	12000/-
3/U-1&2/RPC/SSK/12-13	ECG Machine – 1 Nos.	100/-	5000/-
4/U-1&2/RPC/SSK/12-13	B-Scan Probe 10MHz – 1 Nos.	100/-	5000/-
5/U-1&2/RPC/SSK/12-13	Ophthalmic Chair without panel – 2 Nos.	100/-	5000/-
6/U-1&2/RPC/SSK/12-13	Ophthalmic Chair panel – 1 Nos.	100/-	2000/-
7/U-1&2/RPC/SSK/12-13	Pulse Oxymeter – 1Nos.	100/-	5000/-
8/U-1&2/RPC/SSK/12-13	Adjustable table for USG - 1Nos.	100/-	5000/-
9/U-1&2/RPC/SSK/12-13	Desktop Video Magnifier 1Nos.	100/-	5000/-
11/U-1&2/RPC/SSK/12-13	Disposable 23g, 25g, 20g curved horizontal scissors, ILM forceps, assimetric and gripped forceps – 300 each	2000/-	1,60,000/-
12/U-1&2/RPC/SSK/12-13	Non-Disposable 23g, 25g, 20g curved horizontal scissors, ILM forceps, assimetric and gripped forceps – 10 each	1000/-	30000/-
13/U-1&2/RPC/SSK/12-13	Cardiac Monitor – 1 Nos.	500/-	10000/-
14/U-1&2/RPC/SSK/12-13	Endo Laser 532 -3 Nos	2000/-	1,20000/-
15/U-1&2/RPC/SSK/12-13	Indirect Ophthalmoscope – 13 Nos	2000/-	1,20000/-
16/U-1&2/RPC/SSK/12-13	Binocular Video Indirect Ophthalmoscope – 6 Nos	1000/-	50000/-
17/U-1&2/RPC/SSK/12-13	27G Vitrectomy System – 6 Nos	2000/-	150000/-
18/U-1&2/RPC/SSK/12-13	Xenon with accessories/ Xenon Light Source- 4 Nos	500/-	15000/-
19/U-1&2/RPC/SSK/12-13	Perkins Handheld Tonometer – 6 Nos	500/-	20000/-
20/U-1&2/RPC/SSK/12-13	Transequator Lens – 8 Nos	1000/-	80000/-
21/U-1&2/RPC/SSK/12-13	Iredotomy Lens - 4 Nos	1000/-	40000/-
22/U-1&2/RPC/SSK/12-13	Capsulotomy Lens – 4 Nos	1000/-	40000/-
23/U-1&2/RPC/SSK/12-13	Imaging System for Fundus Camera & Slit Lamps– 2 Nos	1000/-	80000/-
24/U-1&2/RPC/SSK/12-13	Surgeon Chairs (Imported)– 12 Nos	1000/-	50000/-
25/U-1&2/RPC/SSK/12-13	OT Table– 12 Nos	1000/-	75000/-
26/U-1&2/RPC/SSK/12-13	Non Contact Wide angle system & Contact wide lenses for VR surgery – 6 Nos	1000/-	75000/-
27/U-1&2/RPC/SSK/12-13	Local Made Surgeon Chairs for OT – 06 Nos	1000/-	25000/-
28/U-3/RPC/SSK/12-13	Keratoprosthesis – 100 Nos.	1000/-	60000/-
29/U-3/RPC/SSK/12-13	Endothelial donor corneal punches	500/-	15000/-
30/U-3/RPC/SSK/12-13	Hessberg barron suction trephines – 100 Nos.	100/-	5000/-
31/U-3/RPC/SSK/12-13	Lamellar dissectors'- 12 Nos.	100/-	5000/-
32/U-3/RPC/SSK/12-13	Tear osmometre – 01 No.	100/-	2000/-
33/U-3/RPC/SSK/12-13	Corneal asthesiometer – 01 No.	100/-	15000/-
34/U-3/RPC/SSK/12-13	Auto Non Contact Tonometer and Non Contact Pachymeter – 16 Nos.	1000/-	100000/-
35/U-3/RPC/SSK/12-13	Autoref with Keratometer- 16 Nos.	1000/-	100000/-

36/U-3/RPC/SSK/12-13	Wave front diagnostics and topolyzer – 01 No	1000/-	40000/-
37/U-3/RPC/SSK/12-13	Ophthalmic refraction Unit – 16 Nos.	500/-	35000/-
38/U-3/RPC/SSK/12-13	Slit lamp – 03 Nos.	500/-	18000/-
39/U-3/RPC/SSK/12-13	Autolens Analyser – 08 Nos.	1000/-	30000/-
40/U-3/RPC/SSK/12-13	Artificial anterior chamber – 100 Nos.	500/-	20000/-
41/U-4/RPC/SSK/12-13	Hand held keratometer – 01 No.	1000/-	30000/-
42/U-4-OT/RPC/SSK/12-13	USG A&B Scan – 01 No.	1000/-	30000/-
43/U-4-OT/RPC/SSK/12-13	Hand held slit lamp – 01 No.	100/-	10000/-
44/U-4/RPC/SSK/12-13	Laser Machine for selective Laser Trabeculoplasty – 01 No.	1000/-	40000/-
45/U-4/RPC/SSK/12-13	Fibre Optic probe for canaloplasty – 20 Nos.	100/-	10000/-
46/U-4/RPC/SSK/12-13	6 Mirror Gonio Lens – 04 Nos.	100/-	5000/-
47/U-4/RPC/SSK/12-13	4 Mirror hand held Gonioscope Lens – 04 Nos.	100/-	5000/-
48/U-4/RPC/SSK/12-13	Hoskins Barkan Goniotomy Lenses – 02 Sets	100/-	5000/-
49/U-4/RPC/SSK/12-13	UBM with B-Scan – 01 Nos.	1000/-	40000/-
50/U-4/RPC/SSK/12-13	Non-Contact Tonometer – 01 No.	100/-	10000/-
51/U-4/RPC/SSK/12-13	Collagen Implant for Trabeculectomy – 50 Nos.	100/-	6000/-
52/U-4/RPC/SSK/12-13	Drainage device for glaucoma surgery – 20 Nos.	100/-	6000/-
53/U-4/RPC/SSK/12-13	Glaucoma Drainage Implant with valve – 20 Nos.	100/-	6000/-
54/U-6/RPC/SSK/12-13	Anterior segment ocular photography system with Video capture card	1000/-	40000/-
55/U-6/RPC/SSK/12-13	Perkins Hand held applanation tonometer – 06 Nos.	500/-	15000/-
56/U-6/RPC/SSK/12-13	Tonometer- Tonographer – 01 No.	1000/-	30000/-
57/U-6/RPC/SSK/12-13	Hand Held Pachymeter and biometer -02 Nos.	500/-	20000/-
58/U-6/RPC/SSK/12-13	MRI film scanner- 3 Nos. + 01 illumination Box	100/-	10000/-
59/U-6/RPC/SSK/12-13	Distance Rondot Stereoacuity test – 03 Nos	100/-	1000/-
60/U-6/RPC/SSK/12-13	Portable Autorefractometer – 01 No.	500/-	16000/-
61/U-6/RPC/SSK/12-13	Focimeter – 01 No.	100/-	5000/-
62/U-6/RPC/SSK/12-13	Non invansive continouse IOP monitoring device – 02 Nos.	1000/-	40000/-
64/U-6/RPC/SSK/12-13	Hand Held digital fundus camera with anterior segment attachment and Laptop – 01 No	100/-	10000/-
65/U-6/RPC/SSK/12-13	Perimetric progression software – 01 No	100/-	5000/-
67/U-6/RPC/SSK/12-13	Goldmann Projection type Kinetic primeter – 01 No.	1000/-	60000/-
68/U-6/RPC/SSK/12-13	Confocal Scanning Laser opthalmascopy (HRT III) – 01 No.	1000/-	40000/-
69/Casualty/RPC/SSK/12-13	Electric Hydraulic Ophthalmology Operation Table (Imported) 5 Nos.	1000/-	40000/-
70/Casualty/RPC/SSK/12-13	Nd. Yag Laser 1 Nos.	1000/-	60000/-
71/Casualty/RPC/SSK/12-13	A & B Scan (Ultra Sound) – 01 No.	100/-	5000/-
72/Casualty/RPC/SSK/12-13	Slit Lamp Biomicroscope (with Zoom) – 02 Nos.	1000/-	35000/-
73/OPD/RPC/SSK/12-13	Hand-held pediatric autoref – 02 Nos.	100/-	5000/-
74/OPD/RPC/SSK/12-13	Slit Lamp (with provision of digital camera attached) – 01 No.	500/-	20000/-
75/OPD/RPC/SSK/12-13	Non Contact tonometer with pachymeter – 08 Nos.	1000/-	40000/-
76/EB/RPC/SSK/12-13	Class 2 Biosafety Cabinet – 01 No.	100/-	8000/-
77/EB/RPC/SSK/12-13	Slit lamp with camera – 01 No.	1000/-	25000/-
78/EB/RPC/SSK/12-13	Digital camera with a special lenses – 01 No.	100/-	3000/-
79/EB/RPC/SSK/12-13	Hand held slit lamp – 01 No.	100/-	6000/-
80/EB/RPC/SSK/12-13	Eye Bank specular Microscope – 01 No.	1000/-	30000/-
81/EB/RPC/SSK/12-13	Eye Retrieval kit – 20 Nos.	500/-	10000/-
82/EB/RPC/SSK/12-13	Air purifier – 01 No.	100/-	6000/-
83/EB/RPC/SSK/12-13	UV lighter - 04 Nos.	500/-	10000/-

84/EB/RPC/SSK/12-13	Binocular self illuminated loupe – 02 Nos.	100/-	5000/-
85/ Path/RPC/SSK/12-13	Cryostat – 01 No.	1000/-	50000/-
86/ Path/RPC/SSK/12-13	Nano-Drop spectrophotometer – 01 No.	100/-	10000/-
87/ Path/RPC/SSK/12-13	Tissue processing machine – 01 No.	500/-	15000/-
88/ Path/RPC/SSK/12-13	Fluorescent microscope – 01 No.	1000/-	30000/-
89/ Path/RPC/SSK/12-13	Gradient PCR – 01 No	100/-	7000/-
90/ Path/RPC/SSK/12-13	Laminar air flow – 01 No.	100/-	5000/-
91/ Path/RPC/SSK/12-13	Real Time PCR machine – 01 No.	1000/-	50000/-
92/ Path/RPC/SSK/12-13	Electrophoresis Power Supply – 01 No	100/-	5000/-
93/ Path/RPC/SSK/12-13	Bench TOP pH Meter – 01 Nos.	100/-	5000/-
94/ Path/RPC/SSK/12-13	Ultra Sensitive Weighing Balance – 01 Nos.	100/-	5000/-
95/ Path/RPC/SSK/12-13	Vaccum Drier (Centrifuge Evaporator) 01 Nos.	100/-	5000/-
96/ Path/RPC/SSK/12-13	Flow Cytometer – 01 No.	100/-	5000/-
97/Bio/RPC/SSK/12-13	Multimode Microplate Reader – 01 No	1000/-	50000/-
98/Bio/RPC/SSK/12-13	Refrigerated Ultracentrifuge - 01 No.	1000/-	50000/-
99/Bio/RPC/SSK/12-13	Ultra Micro Weighing Balance – 01 No.	500/-	20000/-
100/Bio/RPC/SSK/12-13	CO2 Incubator – 01 No.	100/-	10000/-
101/Bio/RPC/SSK/12-13	Deep Freezer -20°C – 01 No.	100/-	5000/-
102/Bio/RPC/SSK/12-13	Deep Freezer -90°C – 01 No.	500/-	12000/-
103/Bio/RPC/SSK/12-13	Digital Dry Bath Incubator – 01 No.	100/-	2000/-
104/Bio/RPC/SSK/12-13	Ice Flaking Machine – 01 No.	100/-	10000/-
105/Bio/RPC/SSK/12-13	Multi Channel Electronic Pipette – 01 No.	100/-	6000/-
106/Bio/RPC/SSK/12-13	Sonicator – 01 No.	100/-	5000/-
107/Bio/RPC/SSK/12-13	Analytical Wieghing Balance – 01 No.	100/-	5000/-
108/Bio/RPC/SSK/12-13	Automatic Safety Burner – 01 No.	100/-	5000/-
109/Bio/RPC/SSK/12-13	Atuomatic Digital Desiccators – 01 Nos.	100/-	5000/-
110/Micro/RPC/SSK/12-13	Gel Documentation and Image Analysis System (Imported) – 01 No.	100/-	10000/-
111/Micro/RPC/SSK/12-13	- 70°C Deep freezer (Imported)– 01 No	100/-	10000/-
112/Micro/RPC/SSK/12-13	Tissue Homogenizer (Imported) – 01 No.	100/-	10000/-
113/Pharma/RPC/SSK/12-13	Co2 Incubator – 01 No.	100/-	10000/-
114/Pharma/RPC/SSK/12-13	Cold Centrifuge	100/-	5000/-
115/Pharma/RPC/SSK/12-13	Rheometer	100/-	5000/-
116/Pharma/RPC/SSK/12-13	Benchtop NMR spectrometer – 01 No.	1000/-	26000/-
117/Pharma/RPC/SSK/12-13	Multi Mode Microplate Reader	500/-	20000/-
118/Pharma/RPC/SSK/12-13	Buchi type Vacuum Rotary Evaporator	200/-	10000/-
119/Pharma/RPC/SSK/12-13	Horizontal Gel electrophoresis – 01 No.	100/-	5000/-
120/Pharma/RPC/SSK/12-13	2D Gel Electrophoresis with imaging System – 01 No.	500/-	10000/-
121/ Anaes/RPC/SSK/12-13	Videolaryngoscope - 01 No.	1000/-	40000/-
122/ Anaes/RPC/SSK/12-13	Non – Invasive Pulse co-oximeter – 04 Nos.	100/-	15000/-
123/ Anaes/RPC/SSK/12-13	C trash Laryngeal Mask Airway – 01 No.	100/-	15000/-
124/ Anaes/RPC/SSK/12-13	Flash Autoclave – 02 Nos.	100/-	20000/-
125/ Anaes/RPC/SSK/12-13	View a vein – 01 No.	100/-	10000/-
126/ Anaes/RPC/SSK/12-13	CPR manikin adult with feedback – 01 No.	100/-	6000/-
127/ Anaes/RPC/SSK/12-13	CPR Manikin pediatric with feedback – 01 No.	100/-	6000/-
128/ Anaes/RPC/SSK/12-13	Pediatric intravenous arm Trainer – 02 Nos.	100/-	5000/-
129/ Anaes/RPC/SSK/12-13	Adult intravenous arm Trainer – 02 Nos.	100/-	5000/-
130/ Anaes/RPC/SSK/12-13	Drug storage cart – 04 Nos.	100/-	10000/-
131/ Anaes/RPC/SSK/12-13	Radiant warmer – 02 Nos.	100/-	5000/-
132/ Anaes/RPC/SSK/12-13	Defibrilator with CPR Feedback – 01 No.	500/-	20000/-
133/ Anaes/RPC/SSK/12-13	Rigid fiberoscope, pediatric – 01 No.	100/-	6000/-
134/ Radio/RPC/SSK/12-13	Portable ultrasound color Doppler machine – 01 No.	500/-	50000/-
135/COD/RPC/SSK/12-13	Portable Slit lamp – 02 Nos.	500/-	15000/-
136/COD/RPC/SSK/12-13	Fundus Camera – 01 Nos.	1000/-	35000/-
137/COD/RPC/SSK/12-13	Digital Foci meter – 01 Nos.	100/-	2000/-

138/COD/RPC/SSK/12-13	Camera SLR D90 – 01 Nos.	100/-	3000/-
139/COD/RPC/SSK/12-13	Refraction set – 03 Nos.	100/-	6000/-
140/UPS/RPC/SSK/12-13	Stand-by Back-up Module compatible with existing H/W (For 2 year Rate Contract for Different Centre of AIIMS) – 100 Nos.	500/-	20000/-
141/UPS/RPC/SSK/12-13	LIPS system for Microprocessor based system (Wire Interactive power supply system) (For 2 year Rate Contract for Different Centre of AIIMS)	500/-	20000/-

Sale of tender forms: 25/10/2012

Last date of submission: On or before 29/10/2012

Opening of Tender: -

F.No. 1/U-1&2 to 68/U-6:- 30/10/2012

F.No. 69/Casualty to 120/Pharma: - 31/10/2012

F.No. 121/Anaes to 141/UPS: - 01/11/2012

Contact Person : Office of Stores Officer, Room No. 180, 1st Floor, Dr. R.P. Centre, AIIMS, Ansari Nagar, New Delhi – 110 029.

Date of opening of tenders have been indicated in the tender forms. Tender forms containing detailed specifications of items along with terms and conditions can be had from the office of the Asstt. Stores Officer, Dr. R.P. Centre, AIIMS, Ansari Nagar, New Delhi against requisite Pay Order/Demand Draft towards the cost of tender forms (Non-refundable) as mentioned above in favour of the “AO, DR. R.P. C A/c for each tender form separately (Postal Orders/Cash are not acceptable).

The Bid security as mentioned above will have to be deposited through Bank Guarantee/Demand Draft drawn in favour of the “AO, DR. R.P.C A/c along with the tender. No interest is payable on Bid Security.

Tender forms will be supplied by post/per bearer on receipt of request on printed letter head along with the requisite demand draft/pay order for each tender forms separately between 2.00 P.M. to 4.30 P.M. on all full working days and on Saturday from 11.00 A.M. to 12.30 P.M. up to 25/10/2012. If the last date for sale, submission and opening of tender falls on any Government declared holidays, the next working day will be considered as last date for the same.

Please visit our website at www.AIIMS.ac.in or www.AIIMS.edu. And www.tender.gov.in for further details of this tender.

(STORES OFFICER)
Dr. R. P. Centre

Rs. /-

DR. RAJENDRA PRASAD CENTRE FOR OPHTHALMIC SCIENCES
ALL INDIA INSTITUTE OF MEDICAL SCIENCES
ANSARI NAGAR: NEW DELHI: 110 029
(SCHEDULE-'A')

S.NO. OF TENDER : _____

FILE NO. : **Tender No.** **/RPC/SSK/12-13**

Name of the party in whose : _____
Favour the Tender form has _____
been issued _____

The Chief,
Dr. R.P. Centre,
All India Institute of Medical
Sciences , Ansari Nagar.N.Delhi-29

(SEAL OF THE OFFICER)

Dear Sir,

1. I/We hereby submit our tender for the _____
2. I/WE now enclosing herewith the Bank Guarantee/D.D. No..... dated.....
for Rs. _____/- drawn in favour of the “AO, DR. R.P.C, AIIMS, NEW DELHI” towards
**EMD/Bid Security. (TENDERS NOT ACCOMPANIED WITH EMD/BID SECURITY
ALONGWITH THE TECHNO-COMMERCIAL BID SHALL BE SUMMARILY
REJECTED).**
3. I/We have gone through all terms and conditions of the tender documents before submitting the
same.
4. I/We hereby agree to all the terms and conditions, stipulated by the AIIMS, in this connection
including delivery, warranty, penalty etc. Quotations for each group are being submitted under
separate covers, and sheets and shall be considered on their face value.
5. I/We have noted that overwritten entries shall be deleted unless duly cut & re-written and initialed.
6. Tenders are duly signed (No thumb impression should be affixed).
7. I/We undertake to sign the contract/agreement, if required, within 15 (Fifteen days) from the date of
issue of the letter of acceptance, failing which our/my security money deposited may be forfeited
and our/my name may be removed from the list of suppliers at the Dr. R.P. Centre, AIIMS New
Delhi-29.

**NOTE: ALL TERMS & CONDITIONS SUCH AS TAXES ETC, HAS BEEN INDICATED IN THE
QUOTATIONS FAILING WHICH IT WILL BE PRESUMED THAT THE RATES ARE INCLUSIVE OF ALL TAXES
AND OTHER TERMS AND CONDITIONS ARE ALSO AS PER YOUR REQUIREMENTS.**

Yours faithfully,

Signature of
Tender(s) full Address.

WITNESS _____
WITNESS _____
WITNESS _____
WITNESS _____

CHECK LIST FOR TERMS AND CONDITIONS

Check list for Terms and Conditions (To be filled by the bidder and submitted alongwith the technical bid)

1. Certificate for being in business for more than 2 years _____
2. Certificate for sole ownership/partnership _____
3. Statement of financial standing from bankers _____
4. Performance report/List of organization supplied with the same equipment _____

5. Whether rates quoted included all taxes/Rate is a CIF _____
6. Whether rates are quoted as per tenders specifications _____
7. Authority letter from manufacturer/principal enclosed _____
8. Affidavit that the firm has not been black listed in the past by any hospital/Organization _____
9. Affidavit that the firm has no vigilance case/CBI/FEMA case pending against him/supplier(principal) _____

10. Affidavit that the firm is not supplying the same item at the lower rate quoted in the tender to any Govt. organization or any other Institute (Fall clause) _____
11. Quotation being submitted directly by the manufacturer or authorized distributor _____
12. Quality assurance certificate like ISI, ISO-9002, IP/BP or any other, please specify _____
13. Statement of turnover/annual report for each of the last three years are attached _____

14. Bid Security amount deposited is enclosed _____
15. Literature of original catalogue of the product is attached for reference _____
16. Details of Name of beneficiary, Account No. of the beneficiary, IFCS code of the bank/branch enclosed at Page No. _____
17. Comprehensive Guarantee/Warranty period for _____ and thereafter-comprehensive AMC (including all spares & labour) YES/NO. (Tick the option YES/NO) for further years.
18. Compliance Statement with relation to specification _____.

**(NAME OF THE BIDDER)
WITH SIGNATURE & SEAL**

**DR. RAJENDRA PRASAD CENTRE FOR OPHTHALMIC SCIENCES
ALL INDIA INSTITUTE OF MEDICAL SCIENCES
ANSARI NAGAR: NEW DELHI : 110 029
(SCHEDULE-'B')**

Tender Ref. No. : /RPC/SSK/12-13
Subject : Purchase of
Date of Submission : On or before 29-10-2012 upto 4.30.P.M
Date of Opening : F. No. 1/U-1&2 to 68/U-6:- 30/10/2012 at 11.00 AM
: F. No. 69/Casualty to 120/Pharma: - 31/10/2012 at 11.00 AM
: F. No. 121/Anaes to 141/UPS: - 01/11/2012 at 11.00 AM

1. Tender should be addressed to the Chief, Dr. R.P. Centre, All India Institute of Medical Sciences, Ansari Nagar, New Delhi-29 and submitted to the Office of the Stores Officer, Dr. R.P. Centre under sealed cover failing which the tender shall be rejected. Terms and conditions for supply should invariably be indicated otherwise would be taken on its face value. The rates may be quoted on separate sheets failing which the tender(s) will be rejected.
2. Mixed quotations will not be considered for acceptance.
3. **IN CASE OF THE TENDER DOUMENTS DOWNLOADED FROM THE WEBSITE :-**
THE BIDDERS MAY DOWNLOAD THE TENDER DOCUMENTS DIRECTLY FROM THE WEBSITE AVAILABLE AT www.aiims.ac.in, www.aiims.edu, and www.tender.gov.in. IN SUCH CASE, THE BIDDERS ARE REQUIRED TO SUBMIT THE TENDER COST FEE OF Rs. /- (NON-REFUNDABLE) BY WAY OF SEPARATE DEMAND DRAFT DRAWN IN FAVOUR OF "AO, Dr. RPC, AIIMS, New Delhi" AND THE SAME SHOULD ESSENTIALLY BE ENCLOSED ALONGWITH THE TECHNO COMMERCIAL BID. THE BIDDERS SHOULD SPECIFICALLY SUPERSCRIBE, "DOWNLOADED FROM THE WEBSITE" ON THE TOP LEFT CORNER OF THE OUTER ENVELOPE CONTAINING TECHNO COMMERCIAL BID & PRICE BID SEPARATELY. IN NO CASE, THE TENDER COST FEE SHOULD BE MIXED WITH EMD AMOUNT. THE TENDERS NOT FOLLOWING THE ABOVE PROCEDURE WILL BE SUMMARILLY REJECTED.
4. TENDER SHOULD BE SUBMITTED IN TWO BID SYSTEM CONTAINING TWO PARTS AS DETAILED BELOW:
PART-I :- TECHNO-COMMERCIAL BID IN ONE SEALED COVER WITH E.M.D.
PART-II:- PRICE BID/FINANCIAL BID IN ONE SEALED COVER.

BOTH THE SEALED ENVELOPES SHOULD THEN BE PUT IN ONE OUTERCOVER INDICATING THEREON:

- i) Reference No. of the Tender _____
- ii) Tender regarding _____
- iii) Due date for submission of the tender : _____
- iv) Due date for opening of the tender _____
- v) Name of the firm _____

PLEASE NOTE THAT PRICES SHOULD NOT BE INDICATED IN THE TECHNO-COMMERCIAL BID. THE PRE-QUALIFICATION DOCUMENTS INCLUDING E.M.D./BID SECURITY AS REQUIRED IN THE TENDER DOCUMENT SHOULD INVARIABLE BE ACCOMPANIED WITH THE TECHNO-COMMERCIAL BID.

NOTE:- TENDERS SUBMITTED WITHOUT FOLLOWING TWO BID SYSTEM PROCEDURE AS MENTIONED ABOVE WILL BE SUMMARILY REJECTED.

5. The tenderers should give rates, showing taxes, if any, and levies, packing forwarding and insurance charges separately giving full breakup details. THE INSTITUTE IS NOT AUTHORIZED TO ISSUE 'C/D FORMS'. PLEASE EXCLUDE CUSTOM DUTY COMPONENT IN RUPEE QUOTE AS THE INSTITUTE IS EXEMPTED FROM THE PAYMENT OF CUSTOMS DUTY. However, exercise Duty, if any, should be shown separately. Tender not confirming to this requirement shall be rejected and no correspondence will be entertained whatsoever.
6. IN CASE OF IMPORT THE TENDERERS ARE REQUIRED TO QUOTE FOB & CIF VALUE SEPARATELY DULY MENTIONING THE BREAK-UP DETAILS FOR FREIGHT & INSURANCE. THIS CONDITION SHOULD BE STRICTLY ADHERED TO, FAILING WHICH THEIR OFFER WILL BE SUMMARILY REJECTED.
7. **THE TENDERERS ARE REQUESTED TO SUBMIT THE FOLLOWING INFORMATION INVARIABLY TO MAKE PAYMENT THROUGH RTGS/NEFT. "The payment in pursuance of stores supplied/services rendered/work done will be made through RTGS/NEFT & charges incurred for affecting such electronic transfers will be borne by the vendors. The details of present charges for NEFT/RTGS are as under:**
NEFT: Up to Rs.1 lakh – Rs.5/- per transaction
Rs. 1 lakh and above – Rs.25/- per transaction
RTGS: Upto Rs.5 lakh – Rs.25/- per transaction
Rs.5 lakh and above --Rs.50/- per transaction
To make payment through above said mode, the vendor/supplier/contracts have to submit the following information invariably:
 - i. Name of the Beneficiary
 - ii. Account No. of the beneficiary
 - iii. IFCS Code of the Bank/Branch.**Failing which their quotation is liable to be rejected.**
8. **THIS TENDER DOCUMENT IS NON-TRANSFERABLE.**
9. The bid document should be paged and a certificate may be provided on the covering letter indicating the number of pages submitted alongwith the bid.
10. The compliance report of specification should invariably be provided indicating the fulfillment of each parameter of the specifications failing which the offer will be rejected.
11. The checklist may be furnished properly and page No. may be mentioned against each Serial Number.
12. The Tender forms be clearly filled in ink legibly or type written giving full address of the tenderers. The tenderers should quote in figures as well as in words the rates amount tendered by him/them. Any discrepancy between the figures and words, the amount written in words will prevail. Alterations/over-writings, unless legibly attested by the tenderer, shall disqualify the tenders. The tenders should be signed by the tenderer himself/themselves or his/their authorized agent on his/their behalf (Authorization may be enclosed, if applicable).
13. THE FORWARDING LETTER/UNDERTAKING (SCHEDULE 'A') DULY SIGNED SHOULD INVARIABLY BE RETURNED ALONGWITH QUOTATIONS FURNISHED, FAILING WHICH THE TENDER SHALL BE REJECTED.
14. The tenderers should take care that the rates and amounts are written in such a way that interpolation is not possible, no blanks should be left which would otherwise, make the tender redundant.
15. The tender rates should be kept open/valid for a period of one year from the date the tenders are opened.
16. The tenderers shall clarify/state whether he/they are manufacturer, accredited agent or sole representative indicating principals name & address. The offers of firms who are not manufacturer or direct authorized agent will be summarily rejected. **Sub-distributors will not be accepted.**
17. Delivery prospects with definite date of delivery at destination taking into cognizance transit facilities must be indicated.

18. EACH TENDER SHOULD BE ACCOMPANIED WITH AN EMD/BID SECURITY AMOUNTING TO Rs. (as indicated in the tender Notice)- BY WAY OF DEMAND DRAFT/ BANK GUARANTEE DRAWN IN FAVOUR OF "AO, Dr. R.P. Centre, AIIMS, NEW DELHI", (PREFERABLY BANK GUARANTEE) FAILING WHICH THE TENDER SHALL NOT BE CONSIDERED FOR ACCEPTANCE AND WILL BE OUTRIGHTLY REJECTED. IN CASE OF BANK GUARANTEE, IT SHALL BE VALID FOR ONE YEAR FROM THE DATE OF OPENING AND THE SAME SHOULD BE FROM ANY SCHEDULED BANK (AS PER THE LIST ENCLOSED). **CASH/CHEQUE/FDR IS NOT ACCEPTABLE AT ALL.** THE EMD/BID SECURITY DEPOSITED AGAINST OTHER TENDERS CANNOT BE ADJUSTED OR CONSIDERED FOR THIS TENDER. NO INTEREST IS PAYABLE ON EMD/BID SECURITY.
19. If the delivery is not effected on due date, the Director, AIIMS, N. Delhi will have the right to impose penalty as under:
A) First extension for one month or part thereof @2%.
B) Second extension for an additional month or part thereof. @ 3%
20. In case of non supply of Stores within the due date i.e. within the date of delivery, the Director, AIIMS, New Delhi will have the right to impose penalty, as deemed fit, to resort to risk purchase in full or part thereof at his/her discretion, his/her decision shall be final and binding.
21. **SOFT WARE AND HARDWARE UPGRADATION**
The selected firm for the supply of tendered item will have to provide free up-gradation of software (all update & upgrades) upto 5 years from the date of satisfactory installation.
22. Rates quoted should be valid for 12 months from the date of opening of tender.
23. THE TENDERERS MAY BE REQUIRED TO DEMONSTRATE THE QUOTED MODEL OF THE EQUIPMENT DURING THE TECHNICAL EVALUATION, IF REQUIRED, FAILING WHICH THEIR BIDS/OFFER SHALL BE REJECTED. The firms are intimated that they should get ready for demonstration and only one-week time will be provided for arrangement of demonstration and no request for extending time for demonstration will be entertained. Failure to demonstrate, their offer will be summarily rejected.
24. Any other statutory levy imposed by the Govt. of India from time to time will be authorized extra on demand with adequate proof thereof will be paid extra.
25. Force meajure will be accepted on adequate proof thereof.
26. The Chief, Dr. R.P. Centre, AIIMS New Delhi shall be the final authority to reject full or any part of the supply which is not confirming to the specification and other terms and conditions.
27. No payment shall be made for rejected Stores. Rejected items must be removed by the tenderers within two weeks of the date of rejection at their own cost and replace immediately. In case these are not removed, these will be auctioned at the risk and responsibility of the suppliers without any further notice.
28. The Chief, Dr. R.P. Centre, AIIMS, reserves the right to cancel/reject full or any part of the tender which do not fulfill the conditions stipulated in the tender.
29. **Tenderers submitting tenders would be considered to have considered and accepted all the terms and conditions. No enquiries, verbal or written, shall be entertained in respect of acceptance or rejection of the tender.**
30. TENDER MAY BE REJECTED IF THE COPY OF VALUE ADDED TAX (VAT) REGISTRATION IS NOT FURNISHED (IF APPLICABLE).
31. The quantity shown in the tender can be **increased or decreased** to any extent depending upon the actual requirement.
32. Any action on the part of the tenderer to influence anybody in the said Institute will be taken as an offence, he will not be allowed to participate in the tender enquiry and their offer will not be considered.
33. **Material confirming to the specifications should be quoted. Original Catalogue, Leaflets, literatures with full technical details should invariably be attached along with their offer, failing which their offer will be summarily rejected.**
34. **THE TENDERERS MUST QUOT THEIR MODEL STRICTLY AS PER TENDER SPECIFICATIONS.**

35. Genuine equipments and instruments etc., should be supplied. Tenderers should indicate the source of supply i.e. name & address of the manufacturers from whom the items are to be imported, country of origin, country of Shipment etc.
36. The quoted equipment should preferably be of Indian/International standards.
37. The tenderers are required to quote the mode of shipment by Air/Sea/ Airport Parcel and should give separate breakup of freight and Insurance Charges.
38. Supply of equipment means-Installation and Commissioning at site. No separate charges will be paid separately on this account.

39. UP TIME GUARANTEE:

The firm should provide uptime guarantee of 95%.

40. Downtime penalty Clause

40.1 During the Guarantee/warranty period, desired uptime of 95% of 365 days (24 hrs) if downtime more than 5% the institute shall be entitled to impose penalty equal to amount of 0.5% of the total cost of the equipment per day for the first seven days will be payable by the vendor which will doubled on subsequent weeks along with extension of warranty period by the excess down time period. The vendor must undertake to supply all spares for optimal upkeep of the equipment for at least **FIVE YEARS** after handing over the unit to the Institute. If accessories/other attachment of the system are procured from the third party, then the vendor must produce cost of accessory/other attachment and the AMC from the third party separately along with the main offer and the third party will have to sign the AMC with the Institute if required.

In no case instrument should remain in non-working condition for more than 7days, beyond which a penalty of 2% of machine cost will be charged per day.

40. 2 The principals or their agents are required to submit a certificate that they have satisfactory service arrangements and fully trained staff available to support the uptime guarantee.

41 GUARANTEE/WARRANTEE PERIOD: FOR THE EQUIPMENT VALUE UPTO RS. 5 LAKH

41.1.THE TENDERERS MUST QUOTE FOR 2 YEARS COMPREHENSIVE WARRANTY (INCLUDING ALL SPARES, ACCESSORIES AND LABOR) FROM THE DATE OF COMPLETION OF THE SATISFACTORY INSTALLATION. THE WARRANTY CHARGES SHALL NOT BE QUOTED SEPARATELY OTHERWISE THE OFFER SHALL BE SUMMARILY REJECTED. ALSO THE BIDDERS ARE REQUESTED TO SUBMIT THEIR QUOTE (RATES) FOR SUBSEQUENT 3 YEARS COMPREHENSIVE AMC (INCLUDING ALL SPARES, ACCESSORIES AND LABOR). FAILURE TO COMPLY THIS CONDITION WILL ENTAIL THE REJECTION OF THE BIDS. THE PRICE COMPARISION SHALL BE MADE TAKING INTO ACCOUNT ON BASIC PRICE AND POST WARRANTY CMC.

41.2.GUARANTEE/WARRANTEE PERIOD: FOR VALUE OF EQUIPMENTS ABOVE RS. 5 LAKH

THE TENDERERS MUST QUOTE FOR 5 YEARS COMPREHENSIVE WARRANTY (INCLUDING ALL SPARES, ACCESSORIES AND LABOR) AFTER THAT 5 YEARS WITHOUT SPARES FREE SERVICE FROM THE DATE OF COMPLETION OF THE SATISFACTORY INSTALLATION. THE WARRANTY CHARGES SHALL NOT BE QUOTED SEPARATELY OTHERWISE THE OFFER SHALL BE SUMMARILY REJECTED.

42 Delivery: The successful bidders should strictly adhere to the following delivery schedule supply, installation & Commissioning should be effected within 6 to 8 weeks from the date of supply order and this clause should be strictly adhere to failing which administrative action as deemed fit under rules will be taken against the defaulter.

43 SPARE PARTS: The separate price list of all spares and accessories and consumables, if any, (Including minor) required for maintenance and repairs in future after guarantee/warrantee period must be attached/enclosed along with the sealed quotation failing which quotation will not be considered.

If any spares & accessories other than the price list attached/enclosed by the firm are required for future repair it will be borne by the firm only.

44 The tenderers are required to furnish the list of spares along with their cost in the Financial bid failing which their bids are liable to be rejected.

- 45 The tenderer shall furnish a non-blacklisting certificate that the firm has not been blacklisted in the past by any government/Private institution. The tenderer/supplier has to give an affidavit on non-judicial stamp paper of Rs.10/- that there is no vigilance/CBI case pending against the firm/supplier and the firm has not been blacklisted in the past by any Govt. or Private Organization.
- 46 Payment of Agency Commission, if any, payable in rupees must be indicated. If no Agency Commission is admissible from the foreign suppliers must be indicated specifically.
- 47 Tenderers should clearly indicate the name of the Manufacturers/Beneficiary of the Letter of Credit, country of Origin, place of shipment/Airfreightment, etc.
- 48 Local agents quoting on behalf of their foreign suppliers must attach valid authority letter in their favour. In case of distributor, the firm should be direct distributor from the principal's. **Either the Foreign Principals/manufacturers or their authorized Indian Agent should participate in the tender but not both. Also one agent cannot represent two suppliers or quote on their behalf in the same tender. The sub-distributor authority by distributor will not be accepted at all. In case the firm is neither manufacturer nor direct authorized dealer of the manufacturer, such offers will be summarily rejected.**
- 49 SUCCESSFUL TENDERERS WILL HAVE TO FURNISH PERFORMANCE BANK GUARANTEE FOR 10% CONTRACT VALUE FROM ANY SCHEDULED BANK (AS PER THE LIST ENCLOSED) VALID FOR THE WARRANTY PERIOD AND TWO MONTHS EXTRA alongwith the final proforma Invoice.
- 50 The rates quoted for the Stores/Equipments, under the reference, by the supplier shall in no event exceed the lowest price at which the suppliers of the Stores/Equipments of identical description are made to any other person/organization/Institution during the period and should attach an undertaking.

FALL CLAUSE

- 51 If, at any time, during the said period, the supplier reduce the said prices of such Stores/Equipment or sales such stores to any other person/organization/Institution at a price lower than the chargeable, he shall forthwith notify such reduction or sale to the Director, AIIMS and the price payable for the Stores supplied after the date of coming into force of such reduction or sale shall stand correspondingly reduced.
- 52 Successful tenderers, should give pre-alert intimation prior to shipment notifying both the nominated clearing agents as well as the Institute.
- 53 The supplier shall furnish the following certificate to the Accounts Officer alongwith each bill for payment for supplies made against in Rate Contract Tender.
"I/We certify that the Stores of description identical to the Stores supplied to the government under the contract against Tender herein have not been offered/sold by me/us to any other person/organization/Institution upto date of bill/the date of completion of supplies against all supply orders placed during the currency of the tender/rate contract at the price lower than the institute under contract /against tender".
- 54 The supplier shall furnish a list of organizations where the equipment, in question, has/have been supplied with the period during the last one year and performance certificate from such organization may also be provided.
- 55 THE GOODS MUST INVARIABLY BE CONSIGNED THROUGH OUR NOMINATED FREIGHT FORWARDERS INDICATED IN THE SUPPLY ORDER, in case of imported item.

56 A) PAYMENT TERMS (IN CASE OF IMPORTS)

- 1) Agency Commission will be paid to Indian agents in Indian Rupees, after satisfactory installation of equipment.
- 2) Letter of Credit will be opened on CIF value, as the case may be, for full amount after deducting the Agency commission/Technical Service Charges.
- 3) 100% payment shall be released against presentation of shipping documents against a performance Bank Guarantee valid for a period of 26 months from the date of satisfactory Installation certificate issued by the user department for 10% value from any Scheduled Bank (as per the list enclosed) along with final proforma Invoice. In absence of Performance Bank Guarantee, 90% payment will be released against presentation of shipping documents & balance 10% payment will be released after satisfactory Installation certificate issued by the user department and against submission of Performance Bank Guarantee of 10% order value valid for a period of 26 months from the dated of satisfactory Installation certificate issued by the user department.

B) PAYMENT TERMS (IN CASE OF RUPEE OFFER)

100% PAYMENT WILL BE MADE AFTER SUPPLY, installation & satisfactory demonstration of the said equipment subject to submission of Performance Bank Guarantee for 10% order value valid for a period of 26 months from the date of satisfactory Installation certificate issued by the user department, from any Scheduled Bank (as per list enclosed). FALLING WHICH, 90% PAYMENT WILL BE RELEASED AFTER INSTALLATION & BALANCE 10% PAYMENT WILL BE RELEASED AFTER WARRANTY PERIOD, or earlier against submission of Performance Bank Guarantee of 10% order value valid for a period of 26 months from the date of satisfactory Installation certificate issued by the user department.

- C) Payment shall be made through Electronic Clearing System only and the charges shall be deducted from the bill.

SECTION – XV
LIST OF SCHEDULED BANKS

A Nationalized Banks

1. Allahabad Bank
2. Andhra Bank
3. Bank of Baroda
4. Bank of India
5. Bank of Maharashtra
6. Canara Bank
7. Central Bank of India
8. Corporation Bank
9. Dena Bank
10. Indian Bank
11. Indian Overseas Bank
12. Newbank of India
13. Oriental Bank of Commerce
14. Punjab National Bank
15. Punjab & Sindh Bank
16. Syndicate Bank
17. Union Bank
18. UCO Bank
19. United Bank of India
20. Vijaya Bank

B. State Bank of India and its Associated Banks

21. State Bank of India
22. State Bank of Bikaner & Jaipur
23. State Bank of Hyderabad
24. State Bank of Indore
25. State Bank of Mysore
26. State Bank of Patiala
27. State Bank of Saurashtra
28. State Bank of Travancore

C Private Sector Banks

29. Bank of Madura Ltd., Madurai
30. Bank of Rajasthan Ltd., Udaipur
31. Bareilly Corporation Bank Ltd., Bareilly
32. Banares State Bank Ltd., Banares
33. Bharat overseas Bank Ltd., Madras
34. Catholic Syrian Bank Ltd., Trichur
35. Dhanalakshmi Bank Ltd., Alwaye
36. Jammu & Kashmir Bank Ltd., Srinagar
37. Federal Bank Ltd., Alwaye
38. Karnataka Bank Ltd., Mangalore
39. Karur Vysya Bank Ltd.,

40. City Union Bank Ltd.,
41. Lakshmi Vikas Bank Ltd.,
42. Lord Krishna Bank Ltd., Kodangallur
43. Nainital Bank Ltd., Nainital
44. Nedungadi Bank Ltd.,
45. Punjab Co-operative Bank Ltd., Amritsar
46. Ratnakar Bank Ltd.,
47. Sangli Bank Ltd.,
48. South Indian Bank Ltd., Trichur
49. Tamilnadu mercantile Bank Ltd.
50. United Western Bank Ltd.,
51. Vysya Bank Ltd., Bangalore

D. Foreign Banks

52. ABN Amro Bank N.V.
53. American Express Bank Ltd.,
54. Bank of American National Trust
55. Banque Nationale de Paris
56. Bank of Tokyo Ltd.
57. British Bank of the Middle East
58. Standard Chartered bank
59. Oti Bank NA
60. ANZ Gindlays Bank Ltd.,
61. The Sakura Bank Ltd.,
62. Sonali Bank
63. Deutscha bank A G
64. Bank of Oman Ltd.,
65. Abu Dhabi Commercial Bank Ltd.,
66. Banque Indosuez
67. Bank of Nova Scotia, Toronto
68. Societe General, Paris
69. Oman International Bank, SAGO
70. Bank of Bahrain and Kuwait (B.S.C)
71. Hongkong & Shanghai Banking Corporation Ltd.
72. Credit
73. Barelays Bank P/c.
74. Sanwa Bank, Tokyo

E Non-Scheduled Bank

75. Kashi Nath Seth Bank Ltd.
76. Bari Poab Bank Ltd.
77. General Bank of Kurudwad Ltd.

The list of banks is subject to change as and when Reserve Bank of India notifies any change in the list.

F.No.1/U-1&2/RPC/SSK/12-13

90D Lenses – 6 Nos.

F.No. 2/U-1&2//RPC/SSK/12-13

28D Lenses- 6 Nos.

F. No. 3/U-1&2/RPC/SSK/12-13

ECG Machine – 1 Nos.

F. No. 4/U-1&2/RPC/SSK/12-13

B-Scan Probe 10MHz – 1 Nos.

F. No.5/U-1&2/RPC/SSK/12-13

Ophthalmic Chair without panel – 2 Nos.

F. No. 6/U-1&2/RPC/SSK/12-13

Ophthalmic Chair panel – 1 Nos.

F. No. 7/U-1&2/RPC/SSK/12-13

Pulse Oxymeter – 1Nos.

F. No. 8/U-1&2/RPC/SSK/12-13

Adjustable table for USG - 1Nos.

F. No. 9/U-1&2/RPC/SSK/12-13

Desktop Video Magnifier - 1Nos.

F. No. 11/U-1&2/RPC/SSK/12-13

Disposable 23g, 25g, 20g curved horizontal scissors, ILM forceps, assimetric and gripped forceps – 300 each

F. No. 12/U-1&2/RPC/SSK/12-13

Non-Disposable 23g, 25g, 20g curved horizontal scissors, ILM forceps, assimetric and gripped forceps – 10 each

F. No. 13/U-1&2/RPC/SSK/12-13

Cardiac Monitor – 1 Nos.

Endo Laser 532 -3 Nos

1. Should be a diode pumped frequency doubled solid state laser
2. Should have a 532 nm operating wavelength
3. Should have a forced air cooling system
4. Should have a aiming laser wavelength of 635 nm
5. Should have a out put power ranging from 30 mW to 2000 mW (2W)
6. Should have a exposure time of 10ms – 2000 ms and continous wave
7. Should be compatible with Endo laser probes
8. Should have provision to connect two doctors filter
9. Should have provision for remote interlock
10. Should have dual laser ports
11. Should have LED illumination at the ports for visual verification
12. Should have power control in the footswitch
13. Should have Ready – Standby control in the footswitch
14. Should have voice confirmation from the machine
15. Should have power source for LIO on the Console itself
16. Should have electric requirement of 220V
17. Should have LED in the footswitch for visualization in the dark OT.

Indirect Ophthalmoscope – 13 Nos

- Binocular Indirect6 Ophthalmoscope with precision viewing upto 1.0 mm pupil size.
- Spot size: 3 integrated spot size small spot, medium spot and large spot.
- Filters: 4 integrated filters to choose from red filter, cobalt blue filter, yellow filter and diffuser.
- Vertical adjustment, $\pm 4^\circ$
- Integrated flip up adjustment optics which can be flipped and locked at 0° , 12.5° , 47.5° , 60° .
- Aperture and filter adjustment levers: can be locked to the desired position required.
- Locking apertures and filter adjustment (Safety clutch): protect mechanism from the forced adjustment while in the lock position.
- P.D. Range from 46-74 mm.
- 6V Halogen Xenon Bulb.
- Teaching Mirror.
- Rechargeable Li-ion battery transformer with LED indicator
- Desk Top-cum- Wall Transformer.
- Transformer compatible with voltage system of AC 220- 240 Volts.
- Large & small depressors
- Carrying case
- + 20D lens.

F. No. 16/U-1&2/RPC/SSK/12-13

Binocular Video Indirect Ophthalmoscope – 6 Nos

- High resolution A-Cam camera, CCD 470,000 Pixel, 460 lines.
- Image sensor. ½” CCD , color
- Fully integrated camera system. No external brackets or prisms.
- 100% dustproof system. Can be placed in disinfectant solution (but cannot be autoclaved)
- Optics specially- developed. Maximum brightness.
- Focus adjustable for any working distance. From 250 to 800 mm.
- Automatic white balance.
- Automatic light metering at the center of the image. Reduction in reflections.
- Automatic light boost. Boost function for examinations with low lighting.
- Processor will connect to various output devices, such as: VCR's digital printers, PC's with image capture software.
- Compact Light weight design (65g, camera head without cable, complete 250g).
- Connecting cable 3m.
- Brilliant image with an S-VHS monitor
- FBAS (composite) and Y/C (SVHS) outputs. Extensive compatibility and high image quality.
- Optional PAL or NTSC format. Please specify when ordering.
- Ability to display on the PC screen in video and still mode through imaging software.

F. No. 17/U-1&2/RPC/SSK/12-13

27G Vitrectomy System – 6 Nos

A) 27Ga Standard Vitrectomy Pack

- 27ga Vitrectomy Probe
- Cassette/Drain Bag
- Utility/Extrusion Line
- 27ga Midfield Endoilluminator
- Screen Drape
- 3-way Stopcock/Adapter Kit
- 20cc Syringe
- 27ga Port Entry System

B) Port Entry System

C) Illumination

27ga Midfield Endoilluminator

27ga One-Step Endoilluminator

27ga One Step AWH Chandelier

D) Instrumentation

27ga Disposable Eckardt Forceps

27ga Disposable Tano Forceps

E) Laser Probes

27ga Straight Laser Probe

27ga Curved Laser Probe

Xenon with accessories/ Xenon Light Source- 4 Nos

Equipment having facility of Xenon Vapour illumination and laser from laser console to provide Coaxial laser and illumination through single fibre optic cable. Increasing illumination level possible without increasing photo toxic risks.

1. Improved Xenon Vapour illumination with two illumination ports.
2. Suitable for 20ga, 23ga, 25ga, 27ga & 29ga products
3. Facility of coaxial laser and illumination through one fibre.
4. Suitable for 20ga, 23ga and 25ga Directional illuminated laser probe.
5. Facility to use 20ga, 23ga & 25ga illuminated infusion cannula.

Accessories:

25ga Sutureless Chandelier 12/box
23ga Adjustable Endo Illuminator 12/box
20ga Endo Illuminator 12/box
23ga Endo Illuminator 12/box
25ga Endo Illuminator 12/box
20ga Shielded Wide Field Endo Illuminator 12/box
23ga Shielded Wide Field Endo Illuminator 12/box
25ga Shielded Wide Field Endo Illuminator 12/box
29ga Twin Chandelier 12/box
20ga Fixed Extended Illuminated Laser Probe 12/box
23ga Fixed Extended Illuminated Laser Probe 12/box
25ga Fixed Extended Illuminated Laser Probe 12/box
20ga Chandelior Infusion Cannula 12/box
23ga Chandelior Infusion Cannula 12/box
25ga Chandelior Infusion Cannula 12/box
23ga Chow Illuminated Pick 56.07.23P 12/box
23ga Aspirating Endo Illuminator 56.24.23P 12/box

Perkins Hand held Tonometer – 6 Nos

- Hand Held Applanation tonometer using Goldmann prism, with precisely counter balanced movements for use in supine and sitting patients.
- LED illumination
- Tonogrip prism holder
- Integrated rechargeable battery
- The Perkins tonometer should have ability to provide applanation tonometry readings that correlate strongly with Goldmann Tonometer
- Easy to use, light weight
- Tonometer should be a convenient and cost effective measure of intraocular pressure (IOP)

F. No. 20/U-1&2/RPC/SSK/12-13

Transequator Lens – 8 Nos

Primary Application-Mid Peripheral Retinal Diagnosis and Focal/Grid Laser Therapy

- Widefield of view past the equator for pan retinal imaging and treatment
- Excellent substitute for Rodenstock pan fundus Lens

Field of View
110°/132°

Image Mag.
.7x

Laser Spot Mag.
1.44x

F.No. 21/U-1&2/RPC/SSK/12-13

Iredotomy Lens - 4 Nos

A 10mm diameter, A 66D magnifying button in the anterior surface of the lens is positioned over the peripheral iris to give a clear view of the iridectomy site. Laser efficiency is increased compared with using no lens. The lens also helps stabilize the patient's eye and retains the eye lids.

<u>Product Code</u>	<u>Image Mag.</u>	<u>Laser Spot Mag.</u>	<u>Contact Diam.</u>	<u>Lens Height</u>
OAIA	1.5x	.67x	15.5mm	16.5mm

Capsulotomy Lens – 4 Nos

Stabilizes the patient's eye and minimizes the possibility of pitting the IOL during Nd: YAG laser capsulotomy. A 10mm diameter, 66D magnifying button in the centre of the lens enhances visualization and allows precise laser focus on the posterior capsule.

<u>Product Code</u>	<u>Image Mag.</u>	<u>Laser Spot Mag.</u>	<u>Contact Diam.</u>	<u>Lens Height</u>
OAYA	1.8x	.56x	15.5mm	16.5mm

Imaging System for Fundus Camera & Slit Lamps– 2 Nos

Camera System:

- E6 High-Resolution 6MP Imaging System:
- 6MP Film Size
- Color/Monochrome Digital Sensor
- Imaging System
- Angiography Software
- PC computer system (as per Sonomet Escalon Specifications)
- Fire Wire Interface and Cables

PC System:

- Pentium Core 2 QUAD 2.4GHz Processor
 - 2GB RAM
 - 73GB Ultra 320 SCSI Hard Drive 1500RPM
 - Dual 500 GB SATA Drives set as (RAID1*) (MIRROR)
 - Blu-Ray TM Disc Drive 50GB for Image Archiving
 - Gigabit Network Ready
 - 24" LCD Monitor
 - Windows XP (preferred)
- *(RAID1) Provides redundant data backup

Imaging & Angiography Software:

- Built in PDT analysis
- Side-by-side image comparison over time
- Printing
- Auto-montage
- Stereo analysis

Adaptable Fundus Camera Models:

- Zeiss FF3, FF4
- Zeiss FF450, 450+, 450+IR
- Topcon TRC-50VT, 50X, 50EX
- Topcon TRC-501A, 50IX
- Topcon TRC-50DX, Dxi
- Canon 60UV, Uvi
- Canon FC1
- Kowa RC, XV, XV2, XV3

Adaptable Slit Lamps:

- Haag-Streit BQ900
- Zeiss Photoslit
- Topcon SL, 7E, D7

F.No. 24/U-1&2/RPC/SSK/12-13

Surgeon Chairs (Imported)– 12 Nos

Anatomically formed back rest to reduce fresher intervertebral discs and provide support for lumbar spine. Seat system to evenly distribute surgeon weight. Forward leaning seat to support proper blood circulation and reduced fatigue.

Arm Rest :

Sturdy, height adjustable and fully movable in all directions.

Seat System : Flat

Chasis :

- Width 60cm
- Depth 60cm
- Height 95.5cm

With Arm Rest:

Optional battery back up

Dripe 3000 N

Lifting Height – 200 mm

Chasis 470 X 535 mm

Frame 60 X 40 mm

Maximum Load : 150 Kg

SMPS Power supply

OT Table– 12 Nos

Chasis:

- Frame profile 90 X 50 mm
- Outside length 805 mm
- Outside width 605 mm
- Central/broke on both sides, working on four wheels. The direction of two wheels can be independently adjusted.
- Double rimmed casters.
- Detachable foot control (total up/down, head up/down)
- Emergency stop
- Visible screws stainless steel

Lifting Column

Head Part

Power 1,500 N Lifting 29mm

Back Part

Power 4,000 N Lifting 168mm

Seat Part

Power 1,500 N Lifting 202mm

Leg Part

Power 1,500 N Lifting 100mm

Height Adjustment

Power 4,000 N Lifting 300mm Length 467 mm

Motors IPX with read contacts to be memorized

Upper Frame

4-port support frame (head, back, seat, foot)

Length 1,870 – 1,950 mm

Width 610mm

Height adjustment range 582 – 880 mm

Electronic Control

Hand Control with 4 individually programmable memory positions

Auto- rum function, Reset Button

Rese

Battery Unit

As backup system exchangeable without tools, SMPS system, Operating time of the battery for 30 surgeries.

Electromotive Drives

Head, Back, Seat, Foot, Total Up & Down

OT Table & Chair

Should have detachable, swiveling armrest.

Detachable seats.

Max. Load : 250 KG

Weight: 135 KG

Non Contact Wide angle system & Contact wide lenses for VR surgery – 6 Nos

- Can attach to all leading Microscope including Zeiss
- System is available in two platforms
- THE Rotational Assembly (RA) and Condensing Lens Assembly (CLA)
- Have inverter with Auto Clavable (Steam Sterilizable) Lever
- Three High resolution lenses with specification

Wide Angle Lens with 120 degree of FOV

Small diameter with 112 degree of FOV and lens diameter not more than 13mm

Mid field lens with image magnification of more than 0.74X

Fine Focus through Wheel/ Knob

- All the lenses and focusing unit (lens positioning unit) should be Autoclavable (Steam Sterilizable)
- Easy to use and maneuver
- Facility to swing in and swing out when system is not in use
- Easy to install and remove from Microscope

Carrying Case to be provided

- Separate Sterilization case for lenses to be provided.

F. No. 27/U-1&2/RPC/SSK/12-13

Local Made Surgeon Chairs for OT – 06 Nos

Cushioned Chair with arm rests (Swiveling facility) with hydraulic up/ down facility
Heavy floor stand with swivel & wheels

Keratoprosthesis – 100 Nos.

The Boston Keratoprosthesis type I, machined from medical grade polymethylmethacrylate (PMMA) which is a collar button design keratoprosthesis .It should be composed of a front plate with a stem, which houses the optical portion of the device, a back plate and a titanium locking c-ring.

Both the single standard pseudophakic power and customized aphakic optic with an 8.5 mm diameter adult size or 7.0 mm diameter pediatric size back plate are required.

Endothelial donor corneal punches

Disposable , single ready to use donor corneal punches with the cutting block base having four holes in the base of the block and four steel guide posts at the edges for corneal transplantation with trephine diameters as follows :

Numbers required

8mm diameter-100

7.5mm diameter-100

7.25mm diameter-100

7.0mm diameter-100

F. No. 30/U-3/RPC/SSK/12-13

Hessberg barron suction trephines – 100 Nos.

Single use vacuum trephine for partial penetrating keratoplasty with the suction system with disposable syringe with plunger. The trephine blade should be superfine quality.

The sample should be given by the firms and the selection will be based on technical performance.

Trephine diameters required:

7.0mm-100

7.25 mm- 100

7.5mm – 100

8.0mm - 50

F.No. 31/U-3/RPC/SSK/12-13

Lamellar dissectors'- 12 Nos.

1. Short, triangled spatula used to dissect downward into the cornea
2. Half-length, curved spatula with a rounded tip used to make the dissection up to two thirds across the cornea.
3. Full-length, curved spatula used to complete the dissection across the cornea over 360 degrees.

F. No. 32/U-3/RPC/SSK/12-13

Tear Osmometre – 01 No.

Tear osmometer to measure the tear osmolarity should be able to measure osmolarity between 280 to 350 mosm/kg H₂O with a standard deviation of 5 mosm/kg H₂O and resolution of 1 mosm/kg H₂O . The minimum sample required should be 500nl and the test should be complete in less than 15 minutes

Corneal Asthesiometer – 01 No.

The corneal Aesthesiometer for rapid corneal sensitivity examinations should be based upon the principle of pressure transmitted axially by a nylon monofilament, of known diameter but of variable length, for a given bending stress. The length of the thread like mono-filament, controlled by the forefinger should range from 60mm to 5mm. A scale on the Aesthesiometer instrument should indicate the length of the monofilament. When not in use, the tip of the monofilament should be retractable into its body.

F.No. 34/U-3/RPC/SSK/12-13

Auto Non Contact Tonometer and Non Contact Pachymeter – 16 Nos.

Fully integrated tonometer + pachymeter, combining the measurement of IOP and CCT into one instrument.

Specifications:

Tonometer Range : 0-60 mmHg

Pachymeter Range: 200-900 micrometers

With color LCD screen and printer.

F.No. 35/U-3/RPC/SSK/12-13

Autoref with Keratometer- 16 Nos.

Objective and subjective mode and measuring corneal astigmatism, low contrast glare acuity testing. Measureable range-sphere plus/minus 20D, Cyl 0 to 7D, Axis 0 to 180, min. pupil size 2mm, vertex dist. 10.5, 12.0, 13.5, preferably with IOL mode and print out facility.

High accuracy measurements of corneal and contact lens radii and determination of corneal astigmatism. Distance independent co-independent measuring technique. Prism cells for contact lens measurement with power supply unit. Range 4 mm to 13mm radius with 0.01mm increments. Halogen lamp illumination, Steel balls standard radius for calibration. Indigenous Keratometer's performance is not satisfactory.

Wave front diagnostics and topolyzer – 01 No

Wave front diagnostic device works on Tshering principle.

It should be compatible with the Wavelight excimer laser system.

The resolution should be at least 13 by 13 dots.

The measuring beam should be diode 660nm and should allow pupil size to measure 3 to 8 mm.

It should be able to measure – 12 to +6 D sphere and -6 to + 6D astigmatism.

The centration should be done by eye tracking function.

The accuracy of wave front measurement should be Zernike polynomials up to 6th order.

The accuracy of wave front measurement should be Zernike polynomials up to 6th order.

Accuracy of refraction should be +0.01D or -0.01D and repeatability should be +/- 0.05D

Both manual and automatic capturing should be available.

The data input and output should be via PC

Ophthalmic refraction Unit – 16 Nos.

1. One fully upholstered comfortable ophthalmic chair with facility of full motorized recline and up & down movements for $300\text{ mm} \pm 15\text{ mm}$
2. One stand and console with illuminating light for examination.
3. The stand should have adequate space for placing Keratomter or autorefractomter, NCT, Lensometer, Direct Ophthalmoscope and streak retinoscope, Chart projector & Trial lens set.

Slit lamp – 03 Nos.

1. Should have illumination from top using tungsten filament bulb capable of giving illumination intensity up to 600,00Lux.
2. Magnification from 6.3X to 40X having continuous zoom
3. Slit length 0.2 to 8mm
4. Slit length 0.2 to 8mm
5. Eyepieces of 12.5X
6. Facility to tilt the slit image up to 20 deg. Should be available
7. Should have applanation tonometer
8. Should have the facility for stereoscopic examination of fundus where in Angle on stereoscopic observation can be reduced from 13 Deg. To 4.5 Deg. To have better view of eyes with small pupil or high myopia.
9. Facility for viewing into the microscope at 20 deg to horizontal to enable the examiner to keep his head in fatigue free position.
10. Slit lamp should be mounted on spring balanced instrument stand

Autolens Analyser – 08 Nos.

Auto Lens Analyzer for accurate determination of power of various lenses including prisms, multifocals, CL and high index lenses; marking centration facility; Abbe value; software to adjust for different lenses including integrated spectrometer with measurement of UVA UVB with visible light transmission qualities of the lens.

F.No. 40/U-3/RPC/SSK/12-13

Artificial anterior chamber – 100 Nos.

Single use disposable artificial anterior chamber with three pieces: base with tissue pedestal, tissue retainer and locking ring. The base should have provision for silicone tubing, in-line pinch clamps and female Luer Lok connectors. The port should allow injection of viscoelastic , balanced salt solution or air beneath donor cornea. The firm should submit the sample and selection will be based on technical performance.

F.No. 41/U-4/RPC/SSK/12-13

Hand held kerotometer – 01 No.

Radius Curvature:

Range: 5.00 – 10.0 mm

Step : 0.01 mm

Refractive Power :

Range : 33.75 – 67.50 D (n=1.3375)

Step : 0.01 mm

Refractive Power :

Range : 33.75 – 67.50 D (n=1.3375)

Step : 0.01/ 0.12 / 0.25 D

Anstigmatism :

Range : 0 - \pm 10.00 D

Steps : 0.01 / 0.12 / 0.25 D

Axis:

Range : 0 - 180°

Step : 1°

Measuring Area :

3.3 mm (R=7.7 mm)

Eccentricity :

Range : 4.10 - \pm 2.05 D

Measuring Angle : Superior, inferior,

Temporal, nasal at an angle of 25° from the Centre (Slit Lamp joint type is

Recommendable)

Measuring Time:

0.1 sec. or less

Observation Window:

2X magnification

54 (W) x 16 (H) mm

USG A&B Scan – 01 No.

Data management

Data archiving and image/movie export capability
Customized report capability
Custom protocols for scan labeling

B-Scan Modes

Full set of electronic distance measurement calipers with variable velocity

Four sets of electronic angle measurement calipers
Test annotations
Movie sequence capture up to 20 seconds

- Real-time image viewing
- Movie editing capability

10 MHz Posterior Segment

25 frames-per-second image acquisition rate
10-second movie capability
Sealed probe
Adjustable gain (27-90 dB)
Adjustable dynamic range
Axial resolution: 50 microns
Lateral resolution: 100 microns
Scanning angle : 52 degrees

Image depth: 45 mm

2.1 (W) x 0.6 (H)"

Interface: RS-232C

Power Requirements:

DC-6-25V

(Main body, Printer and Battery Charger)

Hardware Features

Built-in DVD burner
Removable one-terabyte hard drive
Wide screen, 1920 x 1200 high-resolution monitor

A-Scan Modes

IOL power calculations and analysis:

- Holladay – I
- SRK-T
- Haigis
- Hoffer-Q

Movie sequence adjustable up to 5 seconds
50 frames-per-second image acquisition rate

Axial Length Biometry A-Scan

Immersion or contact method
Solid focused probe with internal fixation light
Probe frequency: 10 MHz
Image depth: 40 mm
Points on x-axis: 2048
8 bit resolution
Steps of resolution 256
Measurement accuracy: 50 microns inherent, 100 microns clinical
Automatic or manual scan acquisition Built-in pattern recognition with automatic

Hand held slit lamp – 01 No.

- Slit size adjustable from 0.2mm x 10mm to 4mm x 14mm
- 6x magnification
- Blue interference filter (FITC), can be selected for corneal examination.
- Multi-coated optics for maximum light transmission.
- 2.5V or 3.5V XHL Xenon Halogen Technology for bright, white light comparable with the brightness of a classic slit lamp

•
A&B Scan

Network and Connectivity	Electrical Requirements
Five USB 2.0 Ports for memory sticks and peripherals Built-in multimedia reader Fully network and printer-ready (gigabit ethernet) “Easy Print” feature Windows XP operating system Multilingual user interface	Power supply: 100-240 VAC auto-ranging Frequency: 50/60 Hz Input power: 220VA System size: 15.5 x 17 x 6.5 inches (39 x 43 x 16.5 cm) Weight: 26 lbs. (12 kg)

B-Scan Modes	A-Scan Mode
40 MHz UBM Wide-Field Anterior Segment 13 Frames per second image acquisition rate 20-Second movie capability Adjustable gain (27-90 dB) Adjustable dynamic range via Log. S1,S2,S3 Axial resolution : 23 microns Lateral resolution : 33 microns* Scanning angle:30 degrees Image depth: 12.5 mm Image width at focal zone: 15-17 mm Focal range : 10.5 – 14.5 mm	Scleral Echo detection Statistics: average and standard deviation Standardized Diagnostic A-Scan Two caliper measurements displayed in mm with variable velocities Tissue sensitivity value stored in memory with reset function Probe frequency:8 MHz parallel beam Measurement accuracy: 50 microns inherent, 100 microns clinical

F. No. 44/U-4/RPC/SSK/12-13

Laser Machine for selective Laser Trabeculoplasty – 01 No.

Laser System : Portable Q-Switched, frequency-doubled Nd:YAG;532 nm wavelength
Pulse Duration : 3 Nanoseconds
Repetition Rate : 3 Hz
Energy Settings : 0.30 to 2.0 mJ
Pulse Setting : Single pulse-on-demand
Spot Size : 400 micron
Aiming Beam : Diode laser; coaxial, 635 nm wavelength, variably intensity
Laser Delivery : Clip On Type; compatible with slit lamps
Display : Remote Control. Should show exact no. of Shots and total Energy delivered.
Cooling System : Air convection
Power Requirements : 120-230 VAC, 50/60 Hz, switchable input
Weight : 12 Kg
Optional Accessories : SLT Lens, Remote Control
Slit Lamp : Imported 5 Step Magnification Slit Lamp with Imported Motorized Table
Should be US FDA Approved
Service Support : The Principal Company should provide direct service support or should be available directly in India.

F. No. 45/U-4/RPC/SSK/12-13

Fibre Optic probe for canaloplasty – 20 Nos.

Disposable fiber – optic probe for intubation of schlemms canal 40 G

F. No. 46/U-4/RPC/SSK/12-13

6 Mirror Gonio Lens – 04 Nos.

Field of View – 6X63”

Image Mag – 1.0x

Laser Spot Mag – 1.0x

Contact Diameter – 8.4mm

4 Mirror hand held Gonioscope Lens – 04 Nos.

Four 64° mirrors for complete anterior chamber angle viewing with minimal lens rotation. Directly hand held for easy handling and stability . Choice of large or small holding ring. Small diameter contact surface allows static or dynamic gonioscopy without methylcellulose. Advanced technology, multi layer polymer coating protects mirrors and is compatible with most disinfecting methods. Available with red, blue, green, gold, purple, or traditional black holding ring.

Gonio Mag.	Contact Diam.	Lens Height	Ring Diam	Static Gonio POV
.80x	9mm	24.5mm	25mm	80°
.80x	9mm	28.5mm	31.5mm	80°

Hoskins Barkan Goniotomy Lenses – 02 Sets

Designed for transverse goniotomy surgery with the operating microscope, but can also be used as a diagnostic lens. The infant lens is oval and conical in shape, with a 10mm diameter magnified view of the anterior chamber and anterior chamber angle. The premature infant lens is the same in shape and design except the dimension are 1 mm smaller for premature infant surgery. An adult size of 11.5 mm diameter is also available.

<u>Style</u>	<u>Size</u>	<u>Gonio Mag</u>
Infant	10mm	1.30x
Premature Infant	9mm	1.30x
Adult	11.5mm	1.130x

UBM with B-Scan – 01 Nos.

A. Transducer Frequencies:

B Scan Probe : 10 MHz

20 MHz

UBM Probe 35 MHz

50 MHz

B. Probe characteristics (10MHz):

Lateral Resolution : 0.0963 cm +/- 10%

Axial Resolution : + 0.190 mm +/- 10%

Focal Length : 13 – 35 mm (Focal Point 20 mm \pm 2m)

Maximum Frame Rate : 10 FPS

Maximum Scan Angle : 60°

Depth of Field : 80 mm @ 0.5 magnification

Probe characteristics (20 MHz):

Lateral Resolution : 0.0784 cm +/- 10%

Axial Resolution : 0.09mm +/- 10%

Focal Length: 15 – 35 mm (Focal Point 21 mm \pm 1mm)

Maximum Frame Rate : 22 FPS

Maximum Scan Angle : 60°

Depth of Field : 19 mm

Water Path Probe w/35 MHz Thin Film Transducer:

Lateral Resolution : 0.039 cm +/- 10%

Axial Resolution: 0.0219 mm +/- 10%

Focal Length: 11-13 mm (Focal Point 12mm \pm 1mm)

Maximum Frame Rate: 22 FPS

Maximum Scan Angle: 30°

Depth of Field : 19 mm

Water Path Probe w/50 MHz Thin Film Transducer:

Lateral Resolution : 0.041 cm +/- 10%

Axial Resolution: 0.0153 mm +/- 10%

Focal Length: 11-13 mm (Focal Point 12mm \pm 1mm)

Maximum Frame Rate: 22 FPS

Maximum Scan Angle: 30°

Depth of Field : 19 mm

Alarm: Audible and probe freeze when the unit gets close to the cornea

C. Measurement Accuracy all Probes:

Distance Accuracy:

B-Mode: 0.07 mm

UBM – Mode: 0.019 mm

Angle Accuracy: 0.5°

D. Scan Characteristics:

UBM: Scan Rate : 22FPS

Sampling Resolution: 19 μ m

Scan Width: 17.0 mm @ Focal Point

Scan Height: 10mm

Scan Delay (top of image): 7mm

B Scan : Scan Rate: 10FPS
Scan Angle : 60° +/-0.5%
Scan Depth:60 mm +/- 10%

E. Display Monitor / Resolution:

Display Monitor
Maximum Resolution : 1280 X 1024
UBM Image Depth / Width : 512 x 1024
B Scan Image Depth/Width: 512 x 1024
UBM Display in grayscale and color palette. 3

F. Display Functions:

Multiple Calipers, including Arbitrary A-Scan. This unique function provides a very precise tool to measure distances on microns scale. The user defines a line crossing the structures to be measured and the tool provides an A Scan Vector overlay to help identify precisely the interfaces. Finally 2 measuring gates allows to measure in microns.
Angle Measurement
Area Zoom
Pro 2000 (Ishikawa Algorithm)

G. Image Capture:

Video on the images captured. It saves every frame captured by the grabber which can be played back later as a sequence looking like a video clip. Once analyzed, the sequence can be exported as an AVI file to be seen on any compatible computer.
BMP, RLE, or JPG Photo Formats AVI Movies Format

H. Image Functions

Exclusive proprietary algorithm “Focus” based on the principle of deconvolution, allowing increasing the resolution to 19 microns (size of a pixel)

Exclusive E-Gain (exponential gain), which provides a selective amplification of the pure interfaces (echoes) keeping background noise on a low level.

Unique presets which allows the unit to run with the appropriate settings depending the area or function the user is willing to explore. They are “Sulcus to Sulcus”, “High Resolution”, Angle Detail” and “Motion Picture”.

Unique Pro 2000 Post processing image analysis algorithm to make an objective anterior chamber angle evaluation. It provides data like ARA (Angle Recess Area), SS to IR (sclera Spur to Iris Root), AOD (Angle opening Distance) at 250 and 500 microns from the sclera Spur. It also provides a graphical display showing the progression of the angle aperture and distances from the endothelium to the anterior Iris surfaces.

I. Image Storage: x 160 GB, IDE Hard Drive

512K (BMP)
256K (RLE)
32K (JPG)

J. Input/Out Connectors:

Front Panel: Microphone
Head Phone
2USB
Back Panel : 4 USB
Ether Net
Speaker
Microphone

K. Human Interface Devices:

Keyboard

Mouse/Trackball Combo

Three-button Footswitch, which permits complete control of all the functions meanwhile the user keeps both the hands occupied on the exam

L. AC Input Voltage: 90-132VAC or 180-264VAC

Scan Conversion

Maximum Frames per second: 22 FPS

Vector per Frame: 256 Rays

Samples per Vector: 1024

O. Accessories:

50 MHz Transducer

35 MHz Transducer (standard)

20 MHz Probe

10 MHz Probe

Water Bath Probe with cable (Standard)

Photo Printer

Scan Cap Kit

Mobile Cart (Optional)

Console (CPU)

Probe Cable

Foot Switch

USB Video Printer

Goose Neck Gantry arm with probe holder

F. No. 50/U-4/RPC/SSK/12-13

Non-Contact Tonometer – 01 No.

Height	: 1975 in (50.2 cm)
Width	: 10.5 in (26.7 cm)
Depth	: 14 in (35.6 cm)
Weight	: 23 lbs (10.4 kg)
Voltage	: 100/240 VAC
Frequency	: 50/60 Hz
Measurement Range” 7-60 mm Hg (ISO 8612 Tonometer Standard)	

FEATURES:

- Easy to use, touch screen icon based user interface
- No chinrest, joystick, or elevation controls
- Patients simply lean against the forehead rest
- Alignment is completely automated
- One-touch, triple-measurement mode
- Clearly displays all measurement data
- Internal printer simplifies record keeping
- Electronic data transfer via USB port

F. No. 51/U-4/RPC/SSK/12-13

Collagen Implant for Trabeculectomy – 50 Nos.

A biodegradable and implantable scaffold matrix, inducing a regenerative non-scarring wound healing process for implantation under the conjunctiva during trabeculectomy.

Description:

Collagen-glycosaminoglycan scaffold Matrix

Pore diameter 10-300

Size 6 mm diameter X 2mm height

F. No. 52/U-4/RPC/SSK/12-13

Drainage device for glaucoma surgery – 20 Nos.

A stainless steel drainage device for use in glaucoma surgery

To shunt aqueous from the anterior chamber to the subconjunctival space

External diameter 30-500 μm

Internal diameter 30 – 100 μm

Length 1.5 – 3 mm

Bevelled tip for insertion

Disposable insertor system

Back plate with vertical channel for posterior flow

F. No. 53/U-4/RPC/SSK/12-13

Glaucoma Drainage Implant with valve – 20 Nos.

A silicone material implant with plate and tube for glaucoma surgery

Plate/Valve Plate Specifications:

Thickness: 0.9-1.2 mm

Width: 13.00mm-15 mm

Length: 16.00mm-18 mm

Surface Area: 184.00-200 mm²

Tube Specifications:

Length: 25.00-30.00mm

Inner Diameter: 0.305-0.40 mm

Other Diameter: 0.635-.7 mm

Materials:

Valved Plate Body: medical-grade silicone

F. No. 54/U-6/RPC/SSK/12-13

Anterior segment ocular photography system with Video capture card

- Video & still camera facilities for high quality digital images
- Video capture card.
- Software for data entry, recording and archiving
- Slit lamp
- Instrument table
- Requisite data storage computer

F. No. 55/U-6/RPC/SSK/12-13

Perkins Hand held applanation tonometer – 06 Nos.

Hand held applanation tonometer using Goldman prism, with precisely counter balanced movements for use in supine and sitting patients. Battery based handle. Additional rechargeable handle with recharging unit.

F. No. 56/U-6/RPC/SSK/12-13

Tonometer- Tonographer – 01 No.

Instrument to provide ocular pulse amplitude measurements, in addition to tonometry and a tonography mode to measure the facility of aqueous outflow.

F. No. 57/U-6/RPC/SSK/12-13

Hand Held Pachymeter and biometer

Portable hand held pachymeter for measuring corneal thickness in glaucoma patients in OPD and OT

Measurement range 300 – 1000 microns

Accuracy 5 microns

200 MHz probe

Weight 200g

Rechargeable lithium battery

Data storage & transfer facility

IOP correction possible

Infrared printing

F. No. 58/U-6/RPC/SSK/12-13

MRI film scanner- 3 Nos. + 01 illumination Box

Scanning Area: 2.5" x 2.5" (Min.) - 14" x 35" (Max.), Scanning speed: 12 seconds @ 300 dpi, 14" x 17",

Scanning mode: 8 / 12 / 16 grayscale, Optical Resolution: 600 dpi

F. No. 59/U-6/RPC/SSK/12-13

Distance Rondot Stereoacuity test – 03 Nos

Test for distance stereopsis for patients of ages 4 years and above.

- 4 tests in 1 booklet (400 sec of arc to 60 sec of arc)
- 1 pair of Standard 3-D Viewers and 1 pair of Pediatric 3-D Viewers

F. No. 60/U-6/RPC/SSK/12-13

Portable Autorefractometer – 01 No.

Light Weight, hand held

Measurement Range S -18D to +23D C 0 to - 12D, 0 to +12D Axis: 1° to 180°

Increments Auto/0.25D selectable Axis: 1°

Measurement Area 2.5mm

-Consistency Value 10 points

-Reaching Distance 10.9 inch. (278mm)

-Working Distance 2 inch. (50mm) from cover glass

F. No. 61/U-6/RPC/SSK/12-13

Focimeter – 01 No.

For accurate analysis of the power of any lens including multifocal, prisms, contact lens, centration with software to adjust for all lens materials including integrated spectrometer for quick, precise measurement for UVA and UVB and invisible light quality of lens.

Specifications:

Sphere Measuring range -25+25D unit 0.01/0.12/0.25D

Cylinder Measuring range -9.99+9.99D unit 0.01/0.12/0.25D

Axis Measuring range 0180 unit 1 Add Measuring range 0+9.99D unit 0.01/0.12/0.25D Prism Measuring range 06 unit 0.01/0.12/0.25 DDPD

PD

Measuring range 4086mm unit 0.5mm

LCD Display

F. No. 62/U-6/RPC/SSK/12-13

Non invansive continouse IOP monitoring device – 02 Nos.

Proprietary items of the Sensimed triggerfish

Consists of soft hydrophilic contact lens with a guage embedded in the silicone and an antenna. The antenna is attached to a cord to which is connected to a portable recorder. The patient wears the contact lens 24 hours including during sleep.

F. No. 64/U-6/RPC/SSK/12-13

Hand Held digital fundus camera with anterior segment attachment and Laptop – 01 No

Non mydriatic fundus camera light weight portable with anterior segment photography attachment. The smartscope by Optomed is one such device.

F. No. 65/U-6/RPC/SSK/12-13

Perimetric progression software – 01 No

PROGRESSOR software

It is a software that analyses visual field progression in glaucoma patients. Provides a bar chart for each test location.

F. No. 67/U-6/RPC/SSK/12-13

Goldmann Projection type Kinetic primeter – 01 No.

Stimulus size I.V, Goldmann intensities 1a to 4e, with manual stimulus movement.

Confocal Scanning Laser ophthalmoscopy (HRT III) – 01 No.

The HRT3 is the only imaging device with distinct databases for individual ethnic groups, **Glaucoma Probability Score**, or GPS, is a new approach to analyzing HRT data using the latest artificial intelligence methods, producing an easy way to identify the probability of disease. **Topographic Change Analysis (TCA)** is a statistically based progression algorithm that accurately detects structural change over time. **Laptop technology** helps in data transfer in a better way.

Electric Hydraulic Ophthalmology Operation Table (Imported) 5 Nos.

- Multi purpose function for Ophthalmology operation and examination use.
- Disinfectant Resistant stainless steel finished.
- Special design hand holder, more convenience for doctors in operation.
- All stainless steel accessories including clamps.
- Safety Backup all functions or movement of the unit will stop automatically by relief valve. While the maximum ranges are reached.

Table Top Dimensions	60cm (W) X 190 cm(L)
Elevation of Table Top	61cm ⇌ 91 cm
Doctor's Hand Holder	Up/Down Elevation 30cm Adjustable
Elec. Power Source	AC 220V 50 HZ
Power Consumption	500VA
Standard Accessories	St.St.Hand Holder X 1 Pc. Head Rest X 1 Pc. Water Proof Foot Switch X 1 Pc. Power Cord X 1 Pc.

Nd. Yag Laser 1 Nos.

- Laser wavelength 1064nm,
- Structure Mode: super-Gaussian for highly precise beam profile.
- Optical breakdown 2.5 Mj or less in air
- Pulse duration < 4ns
- Max. Laser energy 10mj (Single Pulse), 23mj(Double pulse)
And 37mj (Triple pulse)
- Minimum Energy 0.3Mj – 10mj(Single Pulse)
- Energy levels:22 steps
- Pulse repetition frequency Max.2 Hz.
- Focus diameter 10 micron in air
- Cone angle/Angle of exit aperture 16 Deg.
- Aiming beam Laser diode with 670nm wave Length, It should be with Four point aiming beam system for perfect focusing/ targeting with astigmatic disorders.
- Aiming beam focus offset +/- 150 um posterior & anterior focus shift.
- Remote laser control unit so that laser parameters can be changed by assistant for easy use, It should not be Integrated/mounted on the Slit lamp

F. No. 71/Casualty/RPC/SSK/12-13

A & B Scan (Ultra Sound) – 01 No.

Fully automated A / B Scan with Biometry facility, should have video printer.

Specification for the UltraScan A / B :

B-Scan:..Specification

The unit should have a Sealed Probe , 10Mhz, for taking the B-Scan Image.

It should have facility for documenting the image on a video printer.

Should provide standard video output in RS-170,S-video,RGB.

This unit should have a minimum of 256 shades of gray for enhanced Resolution.

There should be a total of 5 calipers to measure the length, area and circumference of the pathology detected in the image and also 1 additional for measuring the angle between the Iris and the cornea.

The unit should have the ability to Zoom (magnify) the image after the image has been frozen i.e. read Zoom .The unit should also have a window live zoom for detailed examination.

There should be a facility for Multiple segment, sector Time Gain Control (TGC), at least i.e. 4 point , 5 segment . for Enhanced Resolution.

It should have the facility for storing 4 images and multiple users can customise the imaging parameters in this system.

It should have facility to select different scanning depths, selectable from 2 mm, 3mm, 4mm, 5mm, 6mm.

Scan angle should be 52 degree sector.

Sector line density of 255 real lines. 1 : 2 interpolated lines within the scan angle. Caliper measuring accessory of 1mm, 3% which ever is greater. Image resolution of better than 0.2mm axially and 0.5 mm transverse.

The sealed probe should be detachable from the cable connected to the unit.

The unit should have the flexible display modes as under:

Single B, Single B with Vector A, Vector A, Dual B, Dual B with Vector A, Quad B

It should be upgradeable in the future. Large 22cm easy to position monitor for display.

Should have the Option of providing 20 MHz probe for high resolution in future.

Dust cover, Operator manual to be provided.

F. No. 72/Casualty/RPC/SSK/12-13

Slit Lamp Biomicroscope (with Zoom) – 02 Nos.

Slit Lamp Illuminator:

Slit Image Width: 0-8 mm continuous

Slit Image Length: 1-8 mm continuous

Illumination field diameter: 8,5,3,2,1, 0.2 mm test mark with fixation star

Slit Image radial range: ± 90 degrees

Radial movement of slit light illumination relative to microscopic axis: horizontal ± 90 degrees, vertical 0-20 degrees

Filters: blue, red free, grey 10%, heat-absorbing filter

Light source: Light-emitting diode

Working Temperature: 0-50 degrees

Objective lens focal length: 105 mm

Magnification changer: 6.3 x, 10x, 16x, 25x, 40 x

Ocular magnification: 12.5x

Range for adjusting eye- pieces: +8 to -8

Inter- pupillary distance: 52-78 mm

F. No. 73/OPD/RPC/SSK/12-13

Hand-held pediatric autoref – 02 Nos.

Objective should measure corneal astigmatism. Measurable range sphere \geq plus/ minus 20D, Cyl \geq 10D, Axis 0 to 180, min. pupil size 2.0, 2.3mm, vertex dist. 10.5, 12.0, 13.5, preferably with IOL mode and print out facility. Light in weight, operable with one hand.

F. No. 74/OPD/RPC/SSK/12-13

Slit Lamp (with provision of digital camera attached) – 01 No.

1. Should have illumination from top using tungsten bulb capable of giving illumination intensity up to 600,000 Lux. LED powered. Lifetime usage, no replacement required with tilt facility.
2. Magnification from 6.2X to 40X having continuous zoom having steps at 10, 16, 25, 40X
3. Diameter of field should be from 32mm to 5.1mm
4. Slit Length 0.2-8mm
5. Eyepiece of 12.5x
6. Facility to tilt the image up to 20 degree should be available
7. Should have applanation tonometer
8. Should have facility for stereoscopic examination of fundus where in angle all stereoscopic observation can be reduced from 13 degree to 4.5 degree to have better view of eyes with small pupil or high Myopia.
9. Facility for viewing into the microscope at 20 degree to horizontal to enable the examiner to keep his head in fatigue free position.
10. Slit Lamp should be mounted on spring balance instrument stand.
11. Should have the facility of side view attachment.

F. No. 75/OPD/RPC/SSK/12-13

Non Contact tonometer with pachymeter – 08 Nos.

Tonometer Range : 0-60 mmHg,

Pachymeter Range: 200-900 micrometers

Probe Frequency : 20 MHz

With colour LCD screen and printer

Adjustable Table

Class 2 Biosafety Cabinet – 01 No.

The equipment should have following features:

- Cabinet should be of Class II type A2, provided with stand.
- Normal Size of Biosafety Cabinet: 1.2 meters (4 feet).
- External Dimensions: Width= 1300-1350mm, Depth: 700-750mm, Height:1350 - 1400mm
- Internal Dimensions = Width: 1250 - 1300mm, Depth: 550-600mm, Height:650- 700 mm
- Cabinet should have inflow of 100 feet per minute(fpm) and down flow 70 fpm
- Should have Dynamic Chamber plenum design for quiet, uniform airflow.
- Microprocessor controlled with two ULPA (Ultra Low Penetration air)filters, efficiency of >99.999% at 0.1 to 0.3 μ to provide 70% down flow and 30% exhaust with under pressure condition in the working area.
- Cabinet should have frameless front window with non- reflecting safety glass (should have advanced laminated glass).
- Cabinet should have very low noise level (\leq 62 dBA) according to EN 12469 and vibration free.
- Fluorescent Light Intensity of cabinet = >1100 lux
- Cabinet should have control system with visual and buzzer alarm with cabinet information.
- For Air Cleanliness: ISO 14664.1 Class 3 and other equivalent air cleanliness requirements.
- Average air flow- down flow at initial set point; 0.30 m/s and inflow 0.45 m/s
- Cabinet should have 220 V/50Hz power supply.
- Main body should made up 18 gauge electro-galvanized steel, with white oven backed epoxy antimicrobial powder coated finish.
- Biosafety cabinets should have ducting system.
- Demonstration, installation and complete training of the biosafety cabinet should be provided.
- Biosafety Cabinet should have air quality of biosafety standards and installation should include the certificate of standard air quality.
- Biosafety cabinet should be properly installed in the room without damaging existing walls.

Slit lamp with camera – 01 No.

The equipment should have following features:

- Background Illumination adapter
- Beam Splitter
- Digital Adapter
- Camera 12.2 mpx
- Software for Photo Management Canon
- Power adapter
- Memory Card 8 GB
- Electric Table
- Camera parameters are setup, so you don't have to figure out the correct settings.

Microscope :	
Type :	Galilean-Type
Magnification change :	Revolving Drum
Total magnification Ratio :	10×, 16×, 25×
	(standard configuration)
Eyepieces :	12.5×
Angle between eyepieces :	13°
Pupillary adjustment :	55mm~78mm
Diopter adjustment :	±6D
Field of view :	40× (Æ5.5mm), 25× (Æ8.5mm),
	16× (Æ13.5mm), 10× (Æ22mm),
	6× (Æ34.7mm)
Slit Illumination:	
Slit width :	Continuously variable from 0 to 14mm
	(at 14mm, slit becomes a circle)
Slit length :	Continuously variable from 1mm to 14mm
Lamp :	6V/20W Halogen Lamp
Slit angle :	0°~180° (continuously adjustable both vertical and horizontal)
Slit inclination :	4 step : 5°、10°、15°、20°
Filters :	Thermal safety, UV, Red-free, Cobalt Blue
Aperture diameters :	Æ14mm, Æ10mm, Æ5mm,
	Æ3mm, Æ2mm, Æ1mm, Æ0.2mm
Base :	
Longitudinal movement :	90mm
Lateral movement :	100mm
Vertical movement :	30mm

Chin-Rest :	
Vertical movement :	80mm
Fixation :	Green LED
Power:	
Input voltage :	220V/110V $\sim\pm 10\%$
Input frequency :	50Hz/60Hz
Power consumption :	30VA (max)
Output voltage :	Lamp 6V (continuously adjustable)
	Fixation 3V
Dimension & Weight:	
Dimension :	740mm x 450mm x 500mm
Gross weight :	25Kg
Net weight :	24kg
Working environment:	
Temperature :	+5 \sim +40
Relative humidity :	$\leq 80\%$
Air pressure :	800hpa \sim 1060hpa
Storing environment:	
Temperature :	-40 \sim +55
Relative humidity :	$\leq 93\%$
Air pressure :	700hpa \sim 1060hpa
Transporting environment:	
Temperature :	-40 $\square\sim$ +55 \square
Relative humidity :	$\leq 93\%$
Air pressure :	700hpa \sim 1060hpa

Technical Specifications for the Camera

- **12.2-megapixel** CMOS sensor captures enough detail for poster-size, photo-quality prints
- Large 3.0-inch LCD display; to enhanced **Live View** function
- DIGIC III image processor should be fast, having accurate image processing; improved **Autofocus** and framing rate
- EOS Integrated **Cleaning system**, plus Dust Delete Data Detection in included **software**
- Stores images on **SD/SDHC memory cards**

F. No. 78/EB/RPC/SSK/12-13

Digital camera with a special lenses – 01 No.

The equipment should have following features:

Type

Digital, single-lens reflex, AF/AE camera

Recording Media

SD memory card, SDHC memory card, SDXC Memory Card

Image Format

22.3mm x 14.9mm (APS-C size)

Compatible Lenses

EF lenses including EF-S lenses (35mm-equivalent focal length is approx. 1.6x the lens focal length)

Pixels

Effective pixels: Approx. 18.00 Megapixels

Aspect Ratio

3:2 (Horizontal: Vertical)

Color Filter System

RGB primary color filters

Low Pass Filter

Fixed position in front of the CMOS sensor

Recording Format

Design rule for Camera File System 2.0 and Exif 2.21

Image Format

Still: JPEG, RAW (14-bit, Canon original), RAW+JPEG

Video: MOV (Image data: H.264, Audio: Linear PCM)

Color Space

sRGB, Adobe RGB selectable

White Balance

Settings

Auto, Daylight, Shade, Cloudy, Tungsten Light, White Fluorescent Light, Flash, Custom

Color Temperature Information Transmission

Type

Eye-level SLR (with pentamirror)

Magnification

Approx. 0.87x (with 50mm lens at infinity, -1 m⁻¹ (dpt))

Eye Point

Approx. 19mm (from eyepiece lens center)

Dioptric Adjustment Correction

-3.0 to +1.0m⁻¹ (diopter)

Type

TTL-CT-SIR AF-dedicated CMOS sensor

AF Points

9 AF points (center AF point is cross-type)

Focusing Modes

Auto, One-Shot AF, Predictive AI Servo AF, AI Focus AF, Manual Focusing (MF)

AF Point Selection

Automatic selection, manual selection

Shutter

Vertical-travel, mechanical, focal-plane shutter with all speeds electronically controlled 1/4000 sec. to 1/60 sec., X-sync at 1/200 sec.

1/4000 sec. to 30 sec., bulb (Total shutter speed range. Available range varies by shooting mode) Soft-touch electromagnetic release 10-sec. or 2-sec. delay or 10-sec. delay plus continuous shooting Remote Switch RS-60E3

Shutter Speeds

1/4000 sec. to 1/60 sec., X-sync at 1/200 sec.

1/4000 sec. to 30 sec., bulb (Total shutter speed range. Available range varies by shooting mode)

Self Timer

10-sec. or 2-sec. delay or 10-sec. delay plus continuous shooting

Compatible Images

JPEG and RAW images

Dimensions (W x H x D)

Approx. 5.1 x 3.8 x 3.0 in./128.8 x 97.5 x 75.3mm

Working Temperature Range

32-104°F/0-40°C

Working Humidity Range

85% or less

Battery

One Battery Pack LP-E8

F. No. 79/EB/RPC/SSK/12-13

Hand held slit lamp – 01 No.

The equipment should have following features:

- Rechargeable, cordless power supply for slit-lamp examination anywhere.
- Compact and lightweight, so that the examiner can hand hold the unit over a long period with minimal fatigue.
- Extra-bright halogen lamp light source.
- Easy, simple selection of one of three slit widths or spot illumination.
- Quick, one-touch selection of 6x or 10x magnification.
- Built-in blue filter.
- Stand doubles as a battery recharger.

F. No. 80/EB/RPC/SSK/12-13

Eye Bank specular Microscope – 01 No.

The equipment should have following features:

Viewing Field	0.48X0.60mm
Analysis Area	0.20 X 0.28 mm
Chamber Compatibility	Life 4C®, Alcon®, Bausch+Lomb®, Krolman® and MK Medium Vials
Vial Dimensions	up to 35 mm diameter
Thermometer	0° to 45° C
Stage Ranges	Translation: X & Y = 16 mm, Z= 20mm Tilt: 5°
Illumination	LED: primary wavelength 525 nm
Cameras	Dual CMOS: Finder and Cornea
Display	LCD: temperature and pachymetry
Electrical	100-240 VAC, 50/60 Hz, 50 VA
Size	200(W) X 255 (H) X 220 (D) mm
Data Interface	USB 2.0
Weight	6.1 kg (without computer)
Operating Conditions	Ambient temp: 10° to 40° C Relative humidity: 30 to 85% Atmospheric pressure: 70 to 106 kPa

Note: The farm has to provide one color LaserJet printer and one UPS.

F. No. 81/EB/RPC/SSK/12-13

Eye Retrieval kit – 20 Nos.

The kit should have following items with best features:-

- Enucleation spoon
- Enucleation scissors
- Artry clamp
- Speculum
- Fixation Forceps
- Muscle Hook
- Tenotomy
- Scissors
- Swab sticks
- Plain forceps
- Conjunctival Scissors
- Lims forceps

F. No. 82/EB/RPC/SSK/12-13

Air purifier – 01 No.

The equipment should have following features:

- Electronic controls and 4 fan speeds
- Turbo setting
- Should have Sleep mode facility
- True HEPA filter to capture 99.97% of particles as small as 0.3 microns
- Removes airborne allergens such as dust, pet dander, pollen, tobacco smoke, fabric fibers, mold spores
- Charcoal pre-filter traps odors and pre-cleans the air before it reaches the HEPA filter

F. No. 83/EB/RPC/SSK/12-13

UV lighter - 04 Nos.

The UV light should have following features:

- 230W TUV Amalgam XPT lamps
- Single lamp operation possible
- The UV light should have 100% stress testing minimizing 0-hour failures
- Protection against voltage peaks

F. No. 84/EB/RPC/SSK/12-13

Binocular self illuminated loupe – 02 Nos.

The equipment should have following features:

- It should have illumination from a 6v 20w Halogen Lamp.
- Built in blue and red free filters & three step field of illumination.
- Compact and light weight for longer periods without fatigue.
- Precision optics and elegant mechanism, synchronizes the convergence and parallel adjustments.
- Condensing lens & carrying case, Teaching Mirror, S. Depressor, Funds chart, spare Bulb.
- Head Band
- Ophthalmoscope with A494 Light
- Source & F.O. Cable C-450
- Replacement Bulb OSRAM

F. No. 85/Path/RPC/SSK/12-13

Cryostat – 01 No.

- The Instrument should be free-standing motorized open top with independent specimen temperature control via Two separate compressor system.
- Convenient section thickness selection from outside the cryo-chamber.
- Section thickness range : 0.5 to 300 um.
- Temperature setting range –10 deg. To –50 deg. C.
- Cryo-chamber temperature setting down upto –40 deg. C.
- Specimen retraction : 50 um.
- Vertical Specimen Stroke : 50 mm
- Programmable Trimming : 5 to 150 um, in steps of 5, 10, 30, 50, 100 &150 um.
- Window setting for cutting length.
- Should have foot switch as well as buttons at control panel for motorized cutting.
- Manual as well as programmable automatic 24 hours defrost cycle.
- Universal Knife holder base, holder for disposable blades, disposable blades.

F. No. 86/Path/RPC/SSK/12-13

Nano-Drop spectrophotometer – 01 No.

- Micro-volume sample size (0.5-2.0 μ L)
- Easy to use, pipet sample directly onto the pedestal
- No dilutions required, even for highly concentrated samples
- Fast measurement time of less than 5 seconds
- Full spectral output
- Preconfigured methods for A260, A280, labeled DNA or Proteins, and much more
- User-friendly software that includes custom methods and data export capabilities

F. No. 87/Path/RPC/SSK/12-13

Tissue processing machine – 01 No.

- Carousel type with 12 stations of 1.8 litre each;10 reagent stations, 2 wax baths.
- Metal tissue basket having less
Base diameter compare to upper diameter 200, cassettes capacity.
- Delayed start function up to 9 days.
- 9 freely selectable programme.
- Possibility of interrupting an automatic process for reloading or removing cassettes

F. No. 88/Path/PC/SSK/12-13

Fluorescent microscope – 01 No.

- Microscope stand with harmonic component system and variable Koehler illumination.
- Transmitted light with built-in stabilized power supply ,Halogen lamp12V-100W
Three Step focusing.
- 7 fold objective reversed nosepiece.
- Trinocular tube with 25/30 degree viewing angle and three way beam splitting with 100/50/0.
- Rotatable mechanical stage with ultra hard ceramic stage plate and coaxial drive.
- Eyepiece 10x/22,focusable.
- Objectives Plan 4/5x, 10x, 20x, 40x,and 100x (Oil).
- Height Adjustable focus knobs. 5 focus functions --3 step focusing,focus stop,torque adjustment.
- Should have capability to change the stage control knob assembly from left to right side or vice versa by the user.
- Thermal compensation to prevent focus shift due to changes in room/microscope stand temperature.
- Condenser for synchronizing with colour codes of objectives for easy identification.
- Fluorescence with pre centered metal halide illumination having a life span of atleast 2000 hrs with .Blue,green and UV fluorescence filters.Fluorescence turret to accept atleast 5.Filter blocks should feature Zero Pixel Shift technology to prevent image shifting during change of fluorescence filter.
- Digital camera with 5 Megapixel(2560x1920)CCD with active peltier cooling (ambient to -20 degrees) and control software, pixel size 3.45 x 3.45 μm , binning modes for faster frame rate, fast and ultrasharp grayscale modes, exposure time 1msec to 600sec.,Firewire interface, aluminium die cast housing,
- A suitable operating system with atleast 2 GB RAM, Firewire B port, Intel Core 2 Duo or faster with UPS and photoquality printer.
- Microscope should be upgradable with multi viewing station upto 20 stations, phase contrast,dark field,DIC,cytogenetics etc.in future.

F. No. 89/Path/RPC/SSK/12-13

Gradient PCR – 01 No

Thermal Cycler:

- Temperature range : 0-99°C
- Ports : 2 USB
- Memory : 400 typical programs

Gradient:

- Gradient range : 35-99°C
- Temperature differential: 1-16°C

F. No. 90/Path/RPC/SSK/12-13

Laminar air flow – 01 No.

- UV TectTM microprocessor controller
- Class 100 (ISO 5) Vertical Laminar flow
- 48" widths
- 110V or 220 V versions

F. No. 91/Path/RPC/SSK/12-13

Real Time PCR machine – 01 No.

- Thermal Cycling System- Pelter based System
- Block format- 48 well
- Supported volumes- 10-30 μ l
- Supported consumables -48 well (0.1ml) plates with optical adhesive covers
- 48 well (0.1ml) plates with optical flat caps
- 8 tubes (0.1ml) strips with optical flat caps
- Individual (0.1 ml) tubes with optical flat caps
- Sample ramp rate – Fast mode: +/- 2.2 °C/sec
- Standard mode: +/- 1.6°C/sec
- Peak block ramp rate – 4.6°C/sec
- Temperature range – 4 °C- 100 °C
- Temperature accuracy - ± 0.25 °C (35 °C to 95 °C) of set point/ display temperature, measured 3 minutes after clock start
- Temperature uniformity- ± 0.50 °C, measured 30 seconds after clock start over the temperature range of 35 °C to 95 °C
- Melt curve resolution- as small as 0.1 °C
- Optical system – single excitation LED, emission filters, photodiode
- Calibrated dyes at installation- FAM, SYBR Green I, VIC, JOE, ROX dyes
- Passive reference dyes- ROX dye
- Data collection- data collection in all filters for the wells regardless of plate setup, plate set up may be modified after run completes.
- Quantitative PCR run time- fast: <40 minutes
- Standard: <2 hours
- Touch screen – LCD/6.5 in. Full VGA (640X480)/260K colors
- Instrument dimensions- Width: 24.6 cm (9.7 in.)
- Depth: 51.2 cm (20.2 in.)
- Height: 42.7 cm (16.8 in.)
- Weight: 23.6 kg (52 lbs)

F. No. 92/Path/RPC/SSK/12-13

Electrophoresis Power Supply – 01 No

- Out put type : constant voltage or constant current with automatic cross over
- Output voltage: 10-300VDC
- Output current : 4 to 400mA
- Increments : 1mA
- Timer: 0 to 999 minutes
- Display : 3 digit LED
- Output terminals : Four
- Dimensions : 13x8.7x2.9 in ./33x22x7.4cm
- Weight:1.9Kg/4.2lb

F. No. 93/Path/RPC/SSK/12-13

Bench TOP pH Meter – 01 Nos.

- Bench top PH meter UB-5:Ph/temperature,
- Simple one button standerization with ph range 0.00-14.00.
- Auto buffer recognition from 3 sets of 16 buffers, resolution 0.001 ph, accuracy 0.005 ph,
- Automatic temperature compensation and temperature range 0.0-100 C ,
- Resolution 0.1 C, Accuracy 0.2 C,
- Unit Dimensions (LXWXH); 9.0X4.8X3.1 (229X122X79mm)

F. No. 94/Path/RPC/SSK/12-13

Ultra Sensitive Weighing Balance – 01 Nos.

- Readable to 0.0001gram
- Auto-stability indicator
- Real time temperature compensation
- optional,motor driven, built-in calibration weight
- a windscreen that measures 7.5Wx8.25Dx9.5H (inches)
- a circular, 3.5inch weighing pan and standard RS232 interface
- **Capacity-** 210g
- **Readability-** 0.0001g

F. No. 95/Path/RPC/SSK/12-13

Vacuum Drier (Centrifuge Evaporator) 01 Nos.

- Centrifugal speed :1800 rpm(400xg)
- Temperature range: 30 to 60oC
- Lowest vacuum: 5mbar.
- Dimensions:12.8x23x14H in
- Integrated centrifugal concentrator with Teflon
- Membrane pump and rotor for 24x1.5ml/48x.5ml tubes

F. No. 96/Path/RPC/SSK/12-13

Flow Cytometer – 01 No.

- Air Cooled Argon ion Laser (488nm) and Red Diode Laser (635nm)
- The working principle should be single platform, fluorescence based flow cytometry.
- Capable of minimum 5 colour analysis.
- Have user – interchangeable optical filters
- Should have high performance forward scatter, side scatter and fluorescent detectors.
- Should be compatible to all routinely used fluorochemicals and upgradable in future.
- Should have auto sample tube loader for 30 or more tubes preferably with individual vortexing of tubes
- Should allow used defined statistics and gating with real time data analysis.
- Perform the following assays:- Absolute Total Cell Count, DNA Analysis, Multicolour Gating at least 4 colour Immunophenotyping, Leukemia/Lymphoma, HLA B27
- System should be quoted with magnetic based cell sorter as an add on module for the flow Cytometry
- System should be upgradable to plate loader (96 Well plate) in future
- The Company should have their own complete range of reagents for Leukemia (Acute/ Chronic) as per WHO and latest classification . Antibodies for the same has to be quoted.
- The company should provide hands on training for working on the flowcytometer (Application & Service support from direct manufacturer)
- Start up kit should include sheath fluid, calibration reagent, reagent tubes, compensation kit, lyse solution.
- UPS & Colour Laser Printer to be quoted.

Multimode Microplate Reader – 01 No

1. System should have a Dual Monochromator based Multi detection microplate reader with five following detection modes:

- (a). Fluorescence Intensity (Top & Bottom)
- (b). TRF
- (c). HTRF
- (d). UV-Vis Absorbance
- (e). Fluorescence's Polarization
- (f). Glow Luminescence detection

2. General Photometric Performance

- (a). Plate formats : 6, 12, 24, 48, 96, 384 wells and Cuvette Ports for Abs, FI Luminescence Mode
- (b). Light Source : Xenon Flash Lamp (1joule / flash)
- (c). Detector : 2 Photomultiplier tubes or better
- (d). Read time (i) 96-well : Abs-18, FI-17, FP- 42, TRF-17 & Lum- 2 Sec
(ii) 384-well : Abs-49, FI-48, FP-2:03, TRF-48 & Lum-7 Sec
- (e). Shaker Time : 0 to 999 seconds
- (f). Temp Control : 2 °C above ambient to 60 °C
- (g). Temp Uniformity : < 1°C at 37 °C set point
- (h). Temp Accuracy : ± 1 Deg C at 37 Deg C set point,
- (i). Reading Modes : End Point reading / Kinetic reading / Spectral, Scanning for all modes
- (j). Well Scanning : Abs, FI, TRF, Lum

3. Absorbance Photometric Performance

- (a). Reading Capabilities : Cuvette and Microplate
- (b). Wavelength range : 200-1000nm
- (c). Wavelength selection : Monochromator, tunable in 1nm increments
- (d). Wavelength bandwidth : ≤4.0nm
- (e). Wavelength accuracy : ± 2.0nm
- (f). Wavelength repeatability : ± 0.2nm
- (g). Photometric range : 0 to 4.0 OD
- (h). Photometric Resolution : 0.001 OD
- (i). Photometric Accuracy (Microplate) : < ± 0.006 OD ± 1.0 %, 0-2OD
- (j). Photometric Accuracy (Cuvette) : < ± 0.005 OD ± 1.0 %, 0-2 OD
- (k). Photometric precision : < ± 0.003 OD ± 1.0 %, 0-2 OD

4. Fluorescence Intensity Top and Bottom Reading Performance :

- (a). Reading capabilities : Cuvette or top or bottom of a Microplate
- (b). Wavelength range : 250 – 850nm
- (c). Wavelength Selection : Monochromators, tunable in 1nm increments
- (d). Bandwidth (EX, EM) : 9 nm, 15 nm

(e). Sensitivity : ≤ 1 pM fluorescein in 96 wells < 1.5 pM in 384 wells.

5. Time Resolved Fluorescence

- (a). Reading capabilities : Top or Bottom of a Microplate
- (b). Wavelength range : 250–850nm
- (c). Wavelength selection : Monochromators, tunable in 1nm increments
- (d). Bandwidth (EX,EM) : 9nm, 15nm
- (e). Precision Data Collection : 1–100 flashes, delay of 0-600 μ .sec before read, integration time selectable between 50 -1500 μ .sec.
- (f). Sensitivity : 10 fM europium in 96 or 384 wells with top-read.

5. Fluorescence Polarization Performance :

- (a). Wavelength range : 300 – 750nm
- (b). Wavelength Selection : Monochromators, tunable in 1nm increments
- (c). Bandwidth (EX, EM) : 9nm, 15nm
- (d). Precision : < 5 mP Standard Deviation at 1nm Fluorescein in 96 and 384 wells

6. HTRF : System should be Certified for CIS Bio HTRF Assays

7. Luminescence Performance

- (a). Reading capabilities : Cuvette, Top and Bottom of a Microplate
- (b). Wavelength range : 250 – 850nm
- (c). Wavelength selection : all wavelength or with selected Wavelengths
- (d). Sensitivity : ≤ 43 pM ATP in 96 wells
- (e). Cross-talk : < 0.3 % in white 96- and 384-well Microplate

- 8. System should have in-built triple mode cuvette ports for Absorbance, FI and Luminescence, in a single system.
- 9. System should be capable of measuring end-points, kinetics, spectrum scanning, well scanning for all the modes.
- 10. System should have AutoPMT settings that adjust the optimum voltage for each well's sample concentration and then normalizes the raw data to show relative RFU values.
- 11. System should have temperature-independent Path-Check Capability to normalize the results of the wells of the plate as that of cuvette.
- 12. **Data Acquisition** : Software integrated system which provides data acquisition, analysis and management capabilities, allowing cross-plate analysis and custom calculations.
Software should have 120 in-built protocols.
- 13. Suitable branded computer with all accessories
- 14. Onsite application training of all project staff and continuous technical support from qualified application scientist & service engineers should be provided by vendor.

Instructions:

- The selection committee reserves the rights to select the instrument based upon the suitability and sensitivity applicable for the utility for which this instrument would be purchased based on the performance details provided.
- Vendors are instructed to follow the exact sequence of items as listed/ mentioned in the tender specification sheet/s for quoting their tender. The quoted tender for technical bid and price bid will be summarily rejected, if the quoted specification compliance sheet/s not found according to the sequence of the items as listed in the tender specification.
- Please quote only for New Branded machine/s. If it will be found during any period of time that Refurbished/Repaired/Second Hand instruments has supplied and installed instead of new branded machines, an immediate action will be taken against the distributor/ manufacture as per the rules and regulations of AIIMS. And

both distributor and manufacturer will be black listed for forever for supplying any kind of instruments to the Government's Research Organization, Hospitals, Laboratories etc. in any where in India.

- Relevant literature and publications that support the quoted model's ability to perform all of the above capabilities must be attached.
- The entire tender specifications claim about the instrument quoted need to be supported with technical specifications published in manufacturer's technical bulletin/technical notes/technical brochure etc., which must be attached to prove their specification claim, without which it will be assumed that claim is not correct and cannot be considered for technical comparison. Quoted specifications will also be verified from the manufacturer's website.
- A detailed specification sheet highlighting all above specs along with detailed experimental conditions must be attached.
- If required the vendor must be able to demonstrate to the person(s) deputed by the selection committee (along with the experimental conditions decided) to ensure the sensitivity/resolution claims of their make of equipment before opening the financial bid.
- Spares should be given in adequate numbers to maintain 5 years trouble free consumable spare maintenance.
- Please mention about the superior performance details of any unique technology adopted/ design which is protected by intellectual property rights (give patent details) to support the claim of the manufacturer of the instrument.

Refrigerated Ultracentrifuge - 01 No.

Technical Specifications

1. Maximum Speed : 1,40,000 rpm or better
2. Maximum RCF : 10,00,000 g or better
3. Noise Level : 50 db or better
4. Speed Control Accuracy : ± 50 rpm or better
5. Display : Touch sensitive LCD or better technology
6. Rotor Temperature Control : 0 – 40 $^{\circ}\text{C}$ or better
7. Timer: 1min to 80 hrs or better & 50 min with hold function with Real Time Control function
8. Heat radiation rate : 1 kw or better
9. Imbalance protection : 5 mm by visual check
10. Quick startup : Within 8 Sec
11. Vacuum system: Oil rotary vacuum with oil diffusion pump
12. Cooling system: HFC free
13. System should be Floor Model with very low noise design
14. Rotor with Tubes :
 - (a). 01 ml x 10 tubes (Fixed angle)
 - (b). 0.5 ml x 14 tubes (Fixed angle)
 - (c). 0.5 ml x 30 tubes (Fixed angle)
 - (d). 10 ml x 8 tubes ((Fixed angle)
 - (e). 1.5 ml x 12 tubes (Fixed angle)
 - (f). 30 ml x 6 tubes (Fixed angle)
 - (g). 2 ml x 8 tubes (Neo angle)
 - (h). 7 ml x 4 tubes (Swing out)

Instructions

- The selection committee reserves the rights to select the instrument based upon the suitability and sensitivity applicable for the utility for which this instrument would be purchased based on the performance details provided.
- Vendors are instructed to follow the exact sequence of items as listed/ mentioned in the tender specification sheet/s for quoting their tender. The quoted tender for technical bid and price bid will be summarily rejected, if the quoted specification compliance sheet/s not found according to the sequence of the items as listed in the tender specification.
- Please quote only for New Branded machine/s. If it will be find during any period of time that Refurbished/Repaired/Second Hand instruments has supplied and installed instead of new branded machines, an immediate action will be taken against the distributor/ manufacture as per the rules and

regulations of AIIMS. And both distributor and manufacturer will be black listed for forever for supplying any kind of instruments to the Government's Research Organization, Hospitals, Laboratories etc. in any where in India.

- The entire tender specifications claim about the instrument quoted need to be supported with technical specifications published in manufacturer's technical bulletin/technical notes/technical brochure etc., which must be attached to prove their specification claim, without which it will be assumed that claim is not correct and cannot be considered for technical comparison. Quoted specifications will also be verified from the manufacturer's website.
- If required the vendor must be able to demonstrate to the person(s) deputed by the selection committee (along with the experimental conditions decided) to ensure the sensitivity/resolution claims of their make of equipment before opening the financial bid.
- Spares should be given in adequate numbers to maintain 5 years trouble free consumable spare maintenance.
- Please mention about the superior performance details of any unique technology adopted/ design which is protected by intellectual property rights (give patent details) to support the claim of the manufacturer of the instrument.

F. No. 99/Bio/RPC/SSK/12-13

Ultra Micro Weighing Balance – 01 No.

- | | |
|----------------------------------|------------------|
| 1. Capacity x <u>Readability</u> | : 2.1 g x 0.1 µg |
| 2. Repeatability | : ± 0.25 µg |
| 3. <u>Linearity</u> | : ± 0.4 µg |
| 4. Response Time | : 10 seconds |
| 5. <u>Tare Range</u> | : 2.1 grams |
| 6. Sensitivity Drift | : ± 1 ppm / °C |
| 7. Calibration | : internal |

F. No. 100/Bio/RPC/SSK/12-13

CO2 Incubator – 01 No.

1. Capacity: 184L
2. CO₂ Concentration Range: 0 to 20%
3. O₂ Range: 1 to 20%
4. Relative Humidity : Ambient to 95% at 37°C
5. Humidity System: 3L stainless-steel pan
6. Temperature Range : Ambient +5°C to 55°C
7. Temperature Uniformity: $\pm 0.2^{\circ}\text{C}$ at 37°C
8. Chamber : Polished stainless-steel interior with coved corners
9. Interior D x W x H: 20.0 x 21.3 x 26.8 in.
10. Shelving : Stainless steel
11. Exterior L x W x H: 25 x 26.0 x 39.5 in.
12. Port(s) : Chamber thru-wall access port with filter
13. Should have Infra-Red CO₂ Sensor by Digital Signal Processing
14. Should have Auto Zero Calibration
15. Should have precise Digital PID Controller
16. Should have Reliable and Accurate Temperature Control
17. Should have Humidity Pan
18. Should have RS-485 Communication Interface
19. Should have Mobile Alert Control System

Deep Freezer -20°C – 01 No.

1. Temp. Range : -20°C
2. Capacity : 820 L
3. Door type: Double Door
4. System should have Insulated inner doors
5. System should have easy to use door lock, should have heated vacuum valve to prevent a vacuum when opening the door at short intervals
6. System should have Castors and door key lock
7. System should have Heated door frame for easy opening of door
8. System should have Micro processor controller with digital display
9. System should have 100% HCFC/CFC free
10. System should have Battery backup for alarm, logging and temperature display in case of power cut
11. System should have visual and acoustic alarm & Adjustable high/low temperature alarm
12. System should have Power failure alarm & Probe failure alarm
13. System should have Instrument failure alarm & Door open alarm
14. System should have Contact for external remote alarm & option for a for GSM alarm
15. System should have Integrated data logger with software included
16. System should have RS485/232 interface & USB read out
17. System should have auto cycle if probe failure & Ambient temp. Display Straws all alarms
18. System should have Direct download/upload on/from USB memory stick
19. System should have 3 level password protection
20. System should have Battery level indication & integrated memory
21. System should have Option for a chart recorder
22. System should have Power supply (V): 230 & Frequency (Hz): 50/60

Deep Freezer -90°C – 01 No.

1. System should have Dual Refrigeration System and two independent compressors both units are controlled independently and the two separate cooling system
2. Temp. Range : -90°C
3. Capacity : 820 L
4. Door type: Double Door
5. System should have Insulated inner doors
6. System should have easy to use door lock, should have heated vacuum valve to prevent a vacuum when opening the door at short intervals
7. System should have Castors and door key lock
8. System should have Heated door frame for easy opening of door
9. System should have Micro processor controller with digital display
10. System should have 100% HCFC/CFC free
11. System should have Battery backup for alarm, logging and temperature display in case of power cut
12. System should have visual and acoustic alarm & Adjustable high/low temperature alarm
13. System should have Power failure alarm & Probe failure alarm
14. System should have Instrument failure alarm & Door open alarm
15. System should have Contact for external remote alarm & option for a for GSM alarm
16. System should have Integrated data logger with software included
17. System should have RS485/232 interface & USB read out
18. System should have auto cycle if probe failure & Ambient temp. Display Straws all alarms
19. System should have Direct download/upload on/from USB memory stick
20. System should have 3 level password protection
21. System should have Battery level indication & integrated memory
23. System should have Option for a chart recorder
24. System should have Power supply (V): 230 & Frequency (Hz): 50/60

Digital Dry Bath Incubator – 01 No.

1. Temp. Control Range : 5 to 100 °C
2. Timing Range : 1min to 99hr
3. Temp. Control Accuracy: $\leq \pm 0.3$
4. Display Accuracy : 0.1
5. Heating Time: ≤ 12 min
6. Cooling Time : ≤ 30 min
7. Heating & Cooling : Peltier type
8. Should have anodized aluminum block
9. Should have places for 24 tubes x 1.5ml
10. Should have precise microprocessor control
11. Should have programmable temperature and timer
12. Should have wide temperature setting range
13. Sample block designed for easy removal or replacement.

F. No. 104/Bio/RPC/SSK/12-13

Ice Flaking Machine – 01 No.

1. Ice flake production capacity : 25 to 300 Kg Per Day
2. Refrigeration : CFC / HCFC Free
3. Collecting Bin Capacity : 25 to 45 Kg
4. Interior construction : 304 Stainless Steel
5. Outer construction : 20 SWG CRCA Sheet
6. Ice production Start Time : 10-15 Minutes
7. Should have micro processor based temperature control system
8. Should have in-built Auto Cut off
9. Should have castor wheels for easy mobility
10. Should have a drainage system

F. No. 105/Bio/RPC/SSK/12-13

Multi Channel Electronic Pipette – 01 No.

1. Volume range: 0.5-10 μ l, 5-100 μ l, 15-300 μ l, 50-1000 μ l
2. Systematic error : ± 2.0 to ± 5.0 % or better
3. Random error: ± 0.2 to ± 0.8 % or better
4. Should have 12 Channel Electronic Pipette including Charger stand for 4 pipettes

F. No. 106/Bio/RPC/SSK/12-13

Sonicator – 01 No.

1. Power Rating: 150W
2. Variable power output: 0-150 watts
3. Output Frequency: 20-25 KHz
4. Sample volume: 10-100 mL
5. Standard Titanium Horn: Ø3, Ø2, Ø6
6. Should have Digital display, Fully microprocessor controlled and completely programmable
7. Should have Auto-tuning for convenience of use and optimal processing efficiency
8. Integrated Sound Abating Chamber to reduce cavitation sound emitted during processing

F. No. 107/Bio/RPC/SSK/12-13

Analytical Wieghing Balance – 01 No.

- | | |
|-------------------------------|--------------------|
| 1. Readability | : 0.01mg |
| 2. Weighing capacity | : 220 g |
| 3. Average stabilization time | : 2 sec |
| 4. Average response time | : 6 sec |
| 5. Repeatability [mg] | : 0-20 g: 0.015 |
| 6. Linearity | : 0.1 |
| 7. Minimum sample weight | : 0.04 g or better |

F. No. 108/Bio/RPC/SSK/12-13

Automatic Safety Burner – 01 No.

Safety Bunsen burner with following details :

1. Display movement sensor
2. Flame monitor
3. Overheating protection
4. 3 operation modes : Manual, Infrared sensor, Foot switch
5. 2 nozzles for propane/ butane and natural gas
6. Adapter for standard gas hose with inner diameter 10 mm
7. Main Adapter
8. Should be supplied with propane/ butane gas cylinder

F. No. 109/Bio/RPC/SSK/12-13

Automatic Digital Desiccators – 01 Nos.

1. Stainless steel and glass
2. Superior seal integrity
3. Rigid door full length door hinges
4. One piece neoprene door gasket
5. Shelves adjustable in half-inch increments
6. Able to Automatically regenerate the silica gel desiccant at every 5 hours
7. Easy to read door mounted hygrometer
8. Overall W x L x H: 20 1/2" x 23" x 22 1/4")
9. Chamber W x L x H : 15 3/4" x 19 3/4" x 21 3/4

Gel Documentation and Image Analysis System (Imported) – 01 No.

1. GLP compliant Fully Automated Microprocessor based computer controlled Gel Documentation & Image analysis system
 2. CCD Camera with 16-bit performance (not through file generation) and motorized zoom lens (10 X) with close-up facility.
 3. Fully enclosed camera/lens assembly for minimizing the risk of cross contamination of hazardous chemicals between users
 4. Computer controlled motorized filter wheel with filters for EtBr, SyGr, Comassie blue, pink and silver stains, Acridine Orange, Sypro orange and EGFP.
 5. Fully Microprocessor controlled darkroom with openable front door and dual epi-white light.
 6. UV lighting System employing technology to prevent banding effect for gel size of 20 x 30 cm. and variable intensity
 7. Fold down white light pad for viewing protein gels and other white light applications
 8. Neutral Fielding to automatically eliminate uneven light illumination and lens distortion effects
 9. Integral Image Browser to keep trac of all images in all formats
 10. Analysis Software with Automatic band matching facility and FREE life time upgradation
 - 1-D lane analysis; 2-D spot densitometry; Colony or cell counts; Microtitre plate analysis; Microarray analysis; Multiple experiments; Rf/Molecular weight calculations
 - Multiplexing of images captured under different conditions and overly them
 - Multi-layer gel analysis facility (multiple well lines per gel)
 - Ability to analyse thousands of samples per day – high throughput screening zoom control
 - Automatic trac, band and edge finding with manual override
 - Automatic detection and correction for destroyed tracks and grimaced or curved bands
 - Automatic background correction (multiple methods)
 - Full GLP reporting (gel, lane, MW, Qty, trac histogram)
- Software should have Direct link to Excel and Word to display data in a variety of different ways Dendograms, Matching coefficients, matching matrix
11. Database Software for Genomic fingerprinting studies and cluster analysis with FREE lifetime upgradation.
 12. Pentium IV PC (With latest and high configurations to be decided at installation) and UPS system for the PC
 13. Photo quality Epson Inkjet Printer/ Thermal printer for production of high quality B/W images
 14. Power Supply: 220 ~ 240 V/ 50Hz
 15. Stabilizer should be provided if the machine is unstable at fluctuating power supply.
 16. Warranty: 5 years comprehensive including spares
 17. Penalty Clause: In no case instrument should remain not working condition for more than 7 days, beyond which a penalty of 2% of machine cost will be charged per day.

70°C Deep freezer (Imported) – 01 No

- Vertical -86°C freezer to operate on 220 V/50Hz and ambient temperature of 20°C
- Capacity 400 liters or above.
- Stainless steel non corrosive chamber with atleast 4 racks which could be closed separately independent of the main door.
- Vacuum closer of the main door till temperature returns after opening
- Touch pad control, programmable for all parameters along with audio-visual alarm
- Should be tropicalised to work at optical temp of 40°C – 45°C (it may need a compressor up-gradation).
- Gas for 5 fillings, temperature control and relays have to be provided along with the machine
- Audible and visual alarms for temperature, power failure etc.
- Compressor should be capable of running between 190 – 270 V
- 5 years comprehensive warranty with penalty of 2% of machine cost after 7 days of machine failure
- Servo stabilizer should be provided by the supplier

Tissue Homogenizer (Imported) – 01 No.

1. Homogenizer for homogenizing tissue/ cells.
2. Should be ideal for homogenizing, dispersing and emulsifying samples in aqueous media, and tissues.
3. Should be a light weight, hand held and also stand mountable, portable unit.
4. Should be able to work with low as well as high volumes (0.25 to 30 ml) and (50 to 500ml).
5. Should have adjustable speed from 3,000 rpm to 30,000 rpm.
6. Should be provided with probes in duplicates: with rotor stator and screw shaped heads, should be stainless steel, reusable and able to handle volumes as low as 0.25 to 30 ml and (50 to 500ml).
7. Should be provided with stand and other accessories.
8. Power supply: 220/240 v supply.
9. Warranty: 5 years comprehensive including spares.
10. In no case instrument should remain not working condition for more than 7 days, beyond which a penalty of 2% of machine cost will be charged per day.

F. No. 113/Pharma/RPC/SSK/12-13

Co2 Incubator – 01 No.

- Interiors must be made up of stainless steel or copper
- The internal volume of the incubator should range between 200 – 250 L.
- It must have minimum 6 door gas tight segmented access.
- It should have dry heat sterilization option for decontamination.
- Temperature control range between Ambient +3 to 55 Deg C or better
- Recovery time at 37 Deg C must be 10 min or better
- Humidity control 95% H or better
- Recovery time for humidity 20 min or better
- Carbon dioxide control range 0-20% at the inlet pressure of 12-15 LBS with the accuracy of 0.1 or better
- Recovery time up to 5% in 5 min or better

Cold Centrifuge

- Maximum speed in RCF 20000 g
- The centrifuge must be able to accommodate tubes from 0.2 - 100 mL
- Automatic electronic rotor recognition and imbalance detection
- Lowest temperature expected -9°C to 40°C
- Microprocessor controlled operation with digital or software controlled operation

Rheometer

- Speed range 0.01-1200 RPM.
- Torque range 0.25-27 mNm.
- Shear Stress – 0.5 to 3×10^4 Pa.
- Shear Rate range 10^{-2} to 4000.
- Viscosity measuring range from 1 to 10^9 mPas.
- Automatic temperature measurement 20-180°C.
- Internal angle resolution should be 2 μ rad
- Computer, laser printer and UPS for running the software for the instrumental operation

Benchtop NMR spectrometer – 01 No.

- The instrument should have liquid-phase proton NMR system.
- It should have permanent magnet, transmitter, receiver, data acquisition and programmable pulse sequencer.
- It should have Ethernet interface and intuitive web-based control software.
- The larmor frequency should range between 40 to 50 MHz.
- Resolution should be better than 100 ppb.
- SNR should be 300 for water, single shot.
- Capillary should be made up of quartz, 300 um ID.

Multi Mode Microplate Reader

- The Instrument should be a spectral scanning multimode reader including absorbance, fluorescence intensity (top/bottom reading), photometric and ultraluminometric detection technologies and supports endpoint, kinetic and spectral scanning measurements.
- Advanced Monochromator for example dual excitation monochromators and dual emission monochromator for all possible applications. Any other possible advancement in this option may clearly be defined and explained how it is having advantage over the other one. Please enclose the patent information for such option.
- Upgradable interface with newer technologies in this field.
- Label free technology upgradation must be available to do the non-invasive cellular receptor and signaling assays, as well as biochemical binding assays.
- Instrument should be capable to read optical biosensor label-free, fluorescence intensity, absorbance, ultra-sensitive luminescence and alpha technologies in microplates up to 384-wells.
- Instrument should have monochromator wavelength from 230-850 nm at 0.1nm step of increment with a selectable band width for Excitation and Emission as 5nm or better.
- Bottom detection for the 384 well plate should be <5fmol/well or better.
- Operational range of 230-1000 nm in photometry. The OD value for 96well & 384 Well plate to be approx. 0 – 3 OD or better.
- Accuracy in photometry @ 2 optical density should be <2% and Precision @ 2 optical density should be <0.1% or better.
- Monochromator band width required to be 5 nm or better.
- Red Sensitive PMT should be offered as a field upgradeable option without any extra cost to enable luminometry.
- Should be able to do the flash and glow reaction. The 96 well plate ATP and 384 well plate ATP to be < 10 pM (Glow) and <15 amol/well or better.
- On-board incubator for conducting kinetic assay.
- Software controlled programmable reagent dispenser with the option for shaking.
- Software controlled operation expected. Computer of required configuration to run the software with laser printer and UPS must be quoted along with the machine.

Buchi type Vacuum Rotary Evaporator

- Digital vapor temperature and rotation speed display
- PTFE composite vacuum seal for long service life and effective sealing
- Integrated vacuum controllers and run preset time/pressure gradients
- Motorized, quick-action servo-jack to raise and lower glassware
- Wide-range, PTFE-coated 4L heating bath, with digital temperature display, uses oil or water, 20 to 180°C (68 to 356 F)
- Should have insulated heating bath, plastic-coated glassware, and optional remote control and safety shield to ensure safety.
- Process samples from 50 mL to 3 L

Horizontal Gel electrophoresis – 01 No.

1. A horizontal electrophoresis system should be able to run the gel size of 7x10cm & 7 x 7cm in the same tank with safety lid.
2. A system should include UV transparent gel trays of size 7x10 & 7x7cm with integrated fluorescent ruler.
3. A system should include tape free gel casting module for leak free operations.
4. A system should also have an option of using casting gates to allow hassle free casting of gels directly in the electrophoresis cells.
5. A system should include two 1.5mm 8- & 15-well fixed height combs.
6. A system should have the option for adjustable height combs with comb holders.
7. Should have a provision of replacing the electrodes as & when required.

2D Gel Electrophoresis with imaging System – 01 No.

Specifications

Complete system to separate, quantitate, characterize, visualize and analyze proteins in biological samples. System should have following features:

A) Isoelectric focusing unit (1st Dimension):

- System should include 12 different Individual Lane Control for running different samples, pH Gradients and focusing protocols in a single run with different protocols.
- Software Interface for creating and editing protocols and setting up the program rapidly.
- Provision to interface with website for online data interpretation.
- Must provide flexibility to run IPG strips gel side up, gel side down and with cup loading configuration.
- System should have voltage 0–10,000 V, 1 V increments(50-10000V) or better
- Current range should be 0–100 μ A per lane at 1 μ A intervals or better
- System should have peltier based cooling platform.
- Temperature range should be 10–25°C \pm 1.0°C @ max ambient 23°C and 18–25°C \pm 1.0°C @ max ambient 31°C.
- Focusing trays should be made of polycarbonate for contamination free process.
- System should be capable of simultaneously running minimum 12 IPG strips of various lengths like 7, 11, 13, 17, 18, and 24 cm.
- System should have ramping Step, linear, gradual, and hold voltage ramping for each focusing step. Hold mode as a final step to prevent diffusion when IEF is complete.

State-of-the art Computer (if required to run the software) along with laser printer with UPS must be quoted along with the system

B) SDS-PAGE Electrophoresis unit (2nd Dimension):

For Mini gels

- (7 cm) capable of running 2 mini gels simultaneously
- Capable of running hand cast as well as precast gel.
- Separate running and casting module
- Capable of using blotting module to do western blotting.
- Leak proof, tape free and easy to assemble
- Wet transfer blotting module of gel size should be provided

For Large Gels

- Versatile system format to perform SDS, 1D, 2-D and Native gels
- SDS-PAGE apparatus to run 11-13 cm gels and wet blotting system with features mentioned below.
- Capable of running IPG strips
- Provision to enable uniform pressure along entire length of the glass plates which is expected to provide leak proof seal without tapes, grease or agarose.
- Choice of glass plates, spacers & sandwich clamps to cast 2 gels.
- Blotting module of similar gel size should be provided

Power supply

- Output range (programmable) – 10-500 V, fully adjustable in 1 V steps and 0.01-2.5 A, fully adjustable in 1 mA steps, 1-400 W power.
- Type of output – Constant voltage, constant current, constant power or constant temperature.
- Output terminals – 4 pair recessed banana jacks in parallel
- Safety features - No-load detection, sudden load change detection, overload/short-circuit detection, over voltage protection
- Timer - 1 min–99 hr 59 min, fully adjustable

- Graphic LED display.

Gel imaging system

- System with true 16 bit CCD with more than 4 Megapixel image resolution.
- Cooled CCD with cooling range of -30°C absolute temperature using peltier cooling system. (if any other technology used, please quote its superiority)
- System with dynamic flat fielding technology for getting accurate Quantitation with CV < 5 %.
- Multi image color target with multi-channel image display for study of more than 2 dyes at a time for differential expression. Automatic sequential imaging of multi labeled samples.
- System should have 8 different modes of illumination – Trans-UV, epi-white, no illumination for chemiluminescence, trans-white, optional epi-red, optional epi-green, optional epi-blue, and optional trans-blue. All LEDs should be integrated with system for proper imaging of multi target with reproducibility.
- Instrument should have a large transillumination area of which is capable of taking sample of minimum 28x36 cm and should have a minimum imaging area of 26 x 35 cm.
- Capability of stain free gel imaging is essential to avoid time consuming gel/sample staining procedure.
- Instrument should have auto focus technology that is system should automatically take the best focus depending on any zoom level without the movement of sample platform. The sample platform should be fixed at one position to ensure minimal mechanical movement.
- Pixel size should be 6.45 μm x 6.45 μm or bigger.
- Instrument should have a minimum 6 position filter wheel for capturing images of various dyes effectively. The filter wheel should be motorized and automatic without the requirement of manually changing or moving the filter wheel.
- Dynamic range should be >4 orders of magnitude for good quantification.
- Pixel density should be at least 65,535.
- System should offer various binning options with minimum of 2x2, 3x3 and 4x4 for customized sensitivity.

Software for Image acquisition and 1-Dimensional Analysis:

Suitable software compatible with the apparatus to enable all the functions (please quote all salient features)

2-D Gel Analysis software:

- Gaussian modeling based software
- Provision for available algorithms for Automatic Spot Detection & Quantification.
- Spot detection summary matching summary, replicate group consensus tool to optimize spot detection and matching parameter
- Provision for auto recognition and removal of background speckles.
- Possibility of simultaneous analysis of up to 15 gels
- Compatibility for XML data and JPEG file format
- Network license support for more number of users.

Videolaryngoscope - 01 No.

1. One complete set of 6 laryngoscope blade including Macintosh blades with metal finish size 2, 3 and 4.
2. Laryngoscope blade size 0 & 1 can be macintosh or miller blade.
3. One special blade for difficult intubation with the facility for introduction of suction catheter for size 16-18 Fr.
4. All blades should be with integrated camera chip and LED light illumination for obtaining more than 50000 Lux of brightness.
5. Video screen should be 7inch or more in size for display with control buttons on the screen with composite output for connecting to a big screen.
6. Automatic/ manual white balance facility should be available
7. Integrated video as well as still picture recording should be possible on data card or USB drive with JPEG and MPEG4 format. It should be easily transferred to the computer/laptop.
8. Magill forceps for foreign body removal and for assisting nasal intubation.
9. Safety bag or box for screen to be provided.
10. It should be with rechargeable battery.
11. Unit should run on both a/c and battery with battery life more than 100 minutes.
12. Movable stand should be provided to hang the screen.
13. Accessories like protection cap, tray for cleaning and sterilization of blades (at least two blades at a time) should be provided.
14. Blades and connection cable should be fully immersible in disinfecting solution.

Non – Invasive Pulse co-oximeter – 04 Nos.

1. Equipment should have Display type: High resolution TFTdisplay
2. Display of Pulse signal strength, plethysmograph and SpO₂ values, Pulse rate, Perfusion index & trend must be quoted with additional parameters Oxygen Content (SpOC), Carboxyhemoglobin (SpCO), Methemoglobin(SpMet)
3. System should be upgradable to acoustic respiration rate
4. Display of short trend of SPO₂ or PR (selectable) along with plethysmograph
5. At least 72 hrs. Graphical trends for HR and SPO₂., More than 10 days trending facility
6. Equipment should be defibrillator proof
7. Alarm System for low oxygen saturation, high pulse rate and low pulse rate
8. Should be FDA approved to work during low perfusion and during motion conditions.
9. Variable pitch provides tonal variance for change in saturation.
10. Detachable portable hand held for patient transport.
11. SPO₂ range: 1 to 100%.
12. SPO₂ mode.
13. Pulse rate (HR): 30 to 240 bpm.
14. Perfusion index 0.1% to 20%.
15. Alarm both audible & visible.
16. Adult, pediatric and neonate probe should be provided.
17. Rechargeable battery pack with auto charger for minimum 4 hr operation after mains failure.

Power: 220VAC, 50 HZ, Quality Standard: Valid CE or FDA or JIS certificate of the offered model must be submitted

C trash Laryngeal Mask Airway – 01 No.

1. Should have viewer comprising of high resolution color monitor, built in light source, USB port for transfer of images, charging stand.
2. Should be supplied with reusable stabiliser rod for ET Tube.
3. Should have the provision to use the Flexometallic ET Tube made up of 100% silicon of different sizes.

Flash Autoclave – 02 Nos.

1. It should be a fully automatic table top high pressure steam sterilizer with chamber volume of 20 L for sterilization of wrapped, unwrapped, hollow and porous materials and should have cycles for prions also.
2. It should have Integrated steam generator and vacuum pump.
3. It should be a B class & N class sterilizer with cycle time for wrapped instrument should be less than 25 minutes.
4. The sterilization chamber, jacket and steam generator should be made of high quality stainless steel
5. It should have an integrated water purification system.
6. It should have fully microprocessor control system for fully independent checking and control of the sterilization system. Should be complete auto diagnostic system providing error codes on display in case of failure.
7. It should have thermal fuse protection against overheating of chamber and jacket and against operation of the steam generator without water.
8. It should have LCD display and RS 232 interface. Should have automatic door locking mechanism.
9. Sterilization to be achieved at 134 degrees and 121 degrees . The sterilizer should have preloaded programs for wrapped instruments, unwrapped instruments, textiles, rubbers and prions. It should also have preloaded test programs for Bowie-Dick test and Vacuum test.
10. The sterilizer should come with standard accessories like sterilization trays, holders, start up kit etc.
11. It should be ISO, CE, TUV certified and should comply with EN 13060 standard for small sterilizers.
12. The company should have installation in india.

View a vein – 01 No.

1. It should be infrared light to highlight hemoglobin
2. Portable and lightweight
3. It is as simple to use as pointing the device at an area of the skin and clicking to display the peripheral veins beneath.
4. It should illuminate a square shaped area.
5. The device should be non- contact.
6. No sterilization should be needed between uses.
7. It should run on a rechargeable battery, so it doesn't need to be plugged in to an electrical outlet while use.
8. It should be useful for a variety of patients in many settings and serves to supplement existing venipuncture techniques.
9. It should have facility for hands free option i.e. can be mounted on the wheeled stand with an adjustable pole clamp and a flexible arm over to the bedside or chair.
10. When not in use, the device can be floded so it can be easily carried.
11. A universal clamp that can attach to poles and flat surfaces should be provided.
12. It should have power supply cord and multinational adapters and battery.
13. It should have convenient charging cradle kit.

CPR manikin adult with feedback – 01 No.

1. Full Body adult male manikin. The anatomical features desirable for instruction should be as identified by the American Heart Association
2. It should have patented hygienic system facilities provides comfort and safety for the trainee and makes internal cleaning entirely unnecessary.
3. It should have comprehensive design features & anatomical landmarks (adam's apple, carotid arteries, xiphoid process/chest notch, rib cage, navel, nipples) enabling proper hand placement and pulse check.
4. It should feature head tilt/chin lift to open the airway. Airways should open only when head is correctly hyperextended-jaw thrust possible.
5. The Comprehensive design should allow practice of Heimlich maneuver and abdominal thrusts, as well as CPR and mouth-to-mouth breathing.
6. It should be based on a hands-on approach to make vital decisions that can have an immediate effect on the patient's condition.
7. It should have shake test sensor for realistic assessment.
8. Head tilt sensor should be present, to learn tilting the head and open the airway correctly.
9. Carotid pulse check sensor should be present to feel for a pulse.
10. The manikin should have mechanical monitoring instrument that gives instant feedback on ventilation volume, stomach inflation, chest compression, depth and wrong hand positions.
11. Chest rigidity should be adjustable to simulate different body builds
12. Flexible defib electrodes compatible with all leading brands of defibrillation should be present.
13. It should be possible to use Manikin as Intubation Trainer also, for teaching intubation techniques with Laryngoscopes, Endo-Tracheal Tube, LMA & Combitube.
14. Defibrillation upto 360 Joules should be possible to defibrillate as in real life
15. It should have IV trainer, which helps to train students' insertion of cannulas, injection of medication
16. Software programme should be straightforward and easy to use and should be compatible with the latest windows operating software like WINDOWS XP.
17. Should have Drug Box to select medicines and dosage and & simulate injections.
18. The manikin should respond to CPR performance and should also react to any wrong activities, which are not according to the programme.
19. It should have facility to save all training activities, which can be used as a database, helping the Instructor to organise student retraining & compile statistics.
20. Both CPR & ECG Curves should be displayed on screen, giving optimal Information at all times

21. It should have ECG control mode, which allows the instructor to control essential parameters like heart rate, heart rhythm (ECG), pulse rate, defibrillation chance, respiration rate, saturation, consciousness, blood pressure etc.
22. Should give detailed performance report in which all BLS & ACLS performances on manikin should be registered second by second.
23. It should have facility to print the report of the CPR performance.
24. Should be well protected in sturdy carrying case with handle and wheels for manikin.
25. Should have option of both wireless and cables to connect to computer/laptop.
26. The manikin should be supplied with at least 5 face pieces & 100 head bags.
27. There should be at least Three-year warranty.

CPR Manikin pediatric with feedback – 01 No.

1. Full Body Child manikin. The anatomical features desirable for instruction should be as identified by the American Heart Association
2. It should have patented hygienic system facilities provides comfort and safety for the trainee and makes internal cleaning entirely unnecessary.
3. It has a foam filled body with no internal parts to break. It should allow realistic anatomy including nipples, xiphoid process and sternal notch which allows the trainee to find the correct compression point, making the chest/abdomen rise realistically.
4. The Head can be both rotated and extended but the airway will only open in the correct (sniff) position
5. The Comprehensive design should allow CPR and mouth-to-mouth breathing.
6. Ventilation can be seen and natural exhalation through the nose and mouth can be felt and heard.
7. It should have simulated brachial pulse.
8. It should be based on a hands-on approach to make vital decisions that can have an immediate effect on the patient's condition.
9. It should have shake test sensor for realistic assessment.
10. Head tilt sensor should be present, to learn tilting the head and open the airway correctly.
11. The manikin should have mechanical monitoring instrument that gives instant feedback on ventilation volume, stomach inflation, chest compression, depth and wrong hand positions.
12. Flexible defib electrodes compatible with all leading brands of defibrillation should be present.
13. It should be possible to use Manikin as Intubation Trainer also, for teaching intubation techniques with Laryngoscopes, Endo-Tracheal Tube & LMA.
14. Defibrillation upto 200 Joules should be possible to defibrillate as in real life
15. It should have IV trainer, which helps to train students' insertion of cannulas, injection of medication
16. Software programme should be straightforward and easy to use and should be compatible with the latest windows operating software like WINDOWS XP.
17. Should have Drug Box to select medicines and dosage and & simulate injections.
18. The manikin should respond to CPR performance and should also react to any wrong activities, which are not according to the programme.
19. It should have facility to save all training activities, which can be used as a database, helping the Instructor to organise student retraining & compile statistics.
20. Both CPR & ECG Curves should be displayed on screen, giving optimal Information at all times

21. It should have ECG control mode, which allows the instructor to control essential parameters like heart rate, heart rhythm (ECG), pulse rate, defibrillation chance, respiration rate, saturation, consciousness, blood pressure etc.
22. Should give detailed performance report in which all BLS & ACLS performances on manikin should be registered second by second.
23. It should have facility to print the report of the CPR performance.
24. Should be well protected in sturdy carrying case with handle and wheels for manikin.
25. Should have option of both wireless and cables to connect to computer/laptop.
26. The manikin should be supplied with at least 5 face pieces & 100 head bags.
27. There should be at least Three-year warranty

Pediatric intravenous arm Trainer – 02 Nos.

- The IV Trainer for teaching the insertion of cannulas and catheters, the infusion of fluids and the injection of medication, blood sampling and pulse measurement should have following features: - hole closure after penetration, extending the lifetime of the arm.
- It should have movable wrist and rotating arm ensure an absolutely realistic training product, especially when a catheter is placed on the back of the hand.
- It should have replaceable skin and veins made up of natural latex with arm.
- The fluid reservoir is built into the training arm, avoiding a separate reservoir taking up space.
- The valve system should reduce the formation of air pockets in blood vessels.
- The indicator panel should be there to represents each blood vessel, giving immediate feedback if e.g. an infusion is correct.
- It should be supplied with multipurpose carry case serve both as a washable underlay and as a protective case.
- IV Trainer can be mounted on same company child models
- It also incorporates a bracket for easy mounting of infusion stand.
- It should have red dye concentrate, talcum powder and 5ml and 50ml syringe

Adult intravenous arm Trainer – 02 Nos.

- The IV Trainer for teaching the insertion of cannulas and catheters, the infusion of fluids and the injection of medication, blood sampling and pulse measurement should have following features: - hole closure after penetration, extending the lifetime of the arm.
- It should have movable wrist and rotating arm ensure an absolutely realistic training product, especially when a catheter is placed on the back of the hand.
- It should have replaceable skin and veins made up of natural latex with arm.
- The fluid reservoir is built into the training arm, avoiding a separate reservoir taking up space.
- The valve system should reduce the formation of air pockets in blood vessels.
- The indicator panel should be there to represents each blood vessel, giving immediate feedback if e.g. an infusion is correct.
- It should be supplied with multipurpose carry case serve both as a washable underlay and as a protective case.
- IV Trainer can be mounted on same company man models
- Length of arm should be atleast 68cm
- Reservoir capacity should be atleast 260ml
- Weight should be no more than 3kg
- It also incorporates a bracket for easy mounting of infusion stand.
- It should have red dye concentrate, talcum powder and 5ml and 50ml syringe.

Drug storage cart – 04 Nos.

1. Flexible storage system for the many anaesthesia supplies, medication & instruments required in the operating room
2. Should be made of ABS, scratch and corrosive resistant cart, powder coat paint inside and out
3. Should have 5 year warranty
4. Stabilize system to prevent cart from tipping over
5. Castor wheels should be not less than 5 inches.
6. There should be 6 full extension drawer assemblies with roller-bearing slides in various depths-**three at 3inches, two at 6 inches, one at 9 inches** with modular constructions.
7. Divider assemblies for storing assorted items
8. Storage bins on one of the side walls. Drawers should be provided on the another side wall.
9. All the drawers should be provided with divider kit.
10. IV pole with flexible length.
11. Three drawers should be locked separately containing drug
12. A system to lock all the drawers. Locking system should be temper resistant
13. There should be separate medication tray, sharp box, glove box, ampoule cutter
14. Over bridge assembly with shelf for easily accessible additional storage space
15. Pre-threaded holes for accessories on both sides and back
16. Should be easy to clean and durable, ABS top should be easily removable for cleaning
17. Facility to install push handle on either side
18. Cart light should be mounted.
19. Full perimeter bumper assembly to protects cart body during transport
20. Extended smooth work surface with three sided guard rail
21. Caster assemblies with high load bearing capacity and non-marking rubber tires for provide superior maneuverability
22. Power outlet should be there.

Radiant warmer – 02 Nos.

1. Floor Model Radiant Warmer with Ceramic heating element(s) with high-grade steel safety guard.
2. Non-visible infra-red radiation, therefore no impairment of visual examination.
3. Functions: it should have self test.
4. It should have intensity selection from 2 to 30 mW/cm² (depending on distance to the patient pad) in increments of 2 mW/cm².
5. Intensity selection should display in mW/cm².
6. Visual and audible alarm in case of system faults and power failure.
7. Visual and audible alarm as well as automatic intensity reduction after 15 minutes above 10mW/cm². User should be able to confirm the high intensity for further 15 minutes. (Function can be switched-off temporarily.)
8. Height-should be adjustable
9. It should have mobile stand with 4 anti-static castors, 2 of them with kickstop,
10. Mobile stand should be able to adjust according to the OT table width.
11. It should be adjustable to patient level 600 to 1000 mm, distance mark securing the safety distance to the patient bed,
12. The rotation of warmer should be 360°.
13. It should have vertical adjustment of $\pm 45^\circ$

Defibrillator with CPR Feedback – 01 No.

1. The defibrillator should be latest, lightweight, small size with bright colored display
2. The defibrillator should be with Rectilinear Biphasic technology, with 3 wave- form display on screen with minimum 6.5 inches screen size.
3. Weight of defibrillator should not be more than 6.5 Kgs
4. It should display of both selected and delivered energy
5. It should have ability to energy selection from Paddles as well as unit.
6. In manual mode the unit should provide energy selection at (1-10, 15, 20, 30, 50, 70, 85, 100, 150, 200) joules
7. It should have ability to measure chest compression rate and depth in real time with both visual & audible feedback on screen should be available with CPR Index, Lapse time.
8. It should have both adult and pediatric paddles.
9. The unit should have transcutaneous external pacing with 40 milli-second pulse width
10. The unit should have facility for external as well as internal defibrillation.
11. The unit should do self test daily with facility to give print out of defibrillator testing report and also have code ready indicator on unit.
12. It should have ability to filter out CPR artifacts and allowing person to see organized filtered rhythms without interrupting chest compressions.
13. Battery should be capable of delivering minimum 3.5 hrs of ECG monitoring and capability of delivering 100 shocks once fully charged and should have charge level indicator on it.
14. The defibrillator should have facility for measuring following parameters
 - a. SPO2
 - b. ETCO2
 - c. NIBP
 - d. Temperature
15. Defibrillator should be able to upgrade for invasive monitoring.
16. Adult as well as pediatric saturation probes, and obese, adult and pediatric blood pressure cuff should be provided
17. Facility for printed ECG should be there.
18. The defibrillator should be US FDA approved

Rigid fiberoscope, pediatric – 01 No.

1. Rigid fiberoptic scope with malleable tip for superior access to navigate in small spaces
2. Should be able to accommodate any ETT size 2.5 to 5.5
3. Should have light source, handle & oxygen port.
4. Should have adjustable tube stop for sliding up and down the stylet which should be able to fix and hold ET tube in place
5. Camera should be able to connect to the screen for larger view

Portable ultrasound color Doppler machine – 01 No.

A state of art fully digital, compact portable Colour Doppler Ultrasound Machine is required with following technical features for use in Dr. R.P. Centre.

1. It should be suitable for complete orbital & eye applications, vascular access and examination of other small parts. It should allow ophthalmic and general applications both in adults and children & also suitable for interventions.
2. The equipment must be capable of operating in B-mode.
3. It must support transducers with linear, phased array and curved array formats.
4. The system shall have broadband architecture with an operating frequency of at least 1-14 MHz
5. The system shall have the ability to enhance tissue margins and improve contrast resolution by reducing artifacts and improving visualization of texture patterns.
6. System should have special needle visualization within the image, please specify the technology.
7. Unit should be able to give very high image quality with advance technologies like Compound Imaging with at least 5 sights of lines for better contrast resolution, tissue differentiation and edge detection.
8. The system shall process a dynamic range that is at least 165 db. The system must display at a maximum depth of 35 cm.
9. The system shall provide a backlit keypad for ease of use, with facility to disinfect the keypad of system must be possible to avoid any cross contamination.
10. The system shall go from the off status to active scanning in less than 20 seconds.
11. The system should be easy to carry, the system shall not weigh more than 5 kg including battery.
12. The system shall have an LCD screen size no smaller than 10” and must have provision to connect a bigger monitor for use in OT.
13. The system shall have Digital Video Interface (DVI), S-Video, VGA, USB and audio out put.
14. The system shall have the ability to function by AC/DC or battery power with the same degree of functionality, the battery life (run time) shall be at least 2 (two) hours, this needs to be demonstrated.
15. The system must have archive capability for storage and retrieval of images and clips.
16. The system shall support all DICOM functionality, Storage, Print, Work List and also ready to connect to PACS.

Transducers to be supplied with system

1. 6-13(+_1) MHz multi-frequency, broadband linear array transducer for ophthalmic and vascular imaging with less than 40 mm probe foot print.
2. Convex probe of 2- 5 MHz for general applications.
3. 4 – 8 MHz multi-frequency, broadband phased array small foot print transducer for orbital applications for use both in children and adults.

All probes must be supplied with biopsy guide attachments.

Essential Accessories : B/W Thermal printer, original carry bag, original moulded mobile cart (from the principal) with transducer holder and space for printer.

Warranty: The system and transducers should be covered with comprehensive onsite warranty for 5 years.

Essential: 95% uptime guarantee should be provided

Manufacturer shall provide a loan system in case of machine failure.

List of installations within India in Govt. hospitals must be provided.

Portable Slit lamp – 02 Nos.

- This is a slit lamp microscope, with adjustable slit sizes and spot illumination.
- It is totally portable, compact, and lightweight with a lithium battery as power supply,
- It permits long-term continuous lighting for approximately 2 hours with no external power required; large capacity battery.
- It has extra bright halogen lamp light source with quick, one-touch selection of 10X or 16X magnification.
- It has a built-in blue filter.
- It has controllable illumination
- One year warranty with AMC facility

F. No. 136/COD/RPC/SSK/12-13

Fundus Camera – 01 Nos.

1. 12.3 megapixel camera
2. (Mydriatric / Non-Mydriatric) Retinal Imaging System with IMAGE net Software
3. Portable transport unit

F. No. 137/COD/RPC/SSK/12-13

Digital Foci meter – 01 Nos.

Reading system: Illuminated display

Type: digital projection lensmeter

Sphere: 0- ± 25 D, 0.01/0.06/0.12/0.25D steps

Cylinder: 0- ± 10 D, 0.01/0.06/0.12/0.25D steps

Cylinder axis: 0-180°, 1° steps

Prism power

Range: 0-5 Δ , 0.5 Δ steps; 0-20 Δ (with prism unit), 0.5 Δ steps up to 5 Δ , 1 Δ steps beyond 5 Δ

Prism base direction: 0-360°, 1° steps(0-180°), 5° steps(180°-360°)

Lens diameter: 16-100mm

Automatic Printer: included

Power Supply: AC 110V or 220V

Warranty: One year

F. No. 138/COD/RPC/SSK/12-13

Camera SLR D90 – 01 Nos.

1. SLR D90 with VR kit
2. 105mm F2.8 Lense Fitted with Infrared UV Barrierfilters
3. SB 700 Flashgun (UV Photography)
4. Remote for D90 Camera

F. No. 139/COD/RPC/SSK/12-13

Refraction set – 03 Nos.

Spheres From ± 0.12 to ± 20.0

Cylinders From ± 0.12 to ± 6.0

Trial frame with occlude, pin hole etc.

F. No. 140/UPS/RPC/SSK/12-13

Stand-by Back-up Module compatible with existing H/W & S/W (For 2 year Rate Contract for Different Centre of AIIMS).

The back-up module should be capable of working with the existing H/W & S/W. The responsibility of linking the existing H/W – S/W and consumables with the battery standby module shall rest on vendor. The module vah shall be 84/144/204/288/480/780/1200 Any modification to achieve the desired compatibility between standby module and the existing H/W shall be done by the vendor. All modules should carry a warranty of one year from the date of installation.

LIPS system for Microprocessor based system (Wire Interactive power supply system) (For 2 year Rate Contract for Different Centre of AIIMS)

1. UPS should have wide input voltage range to run on the mains mode. Batteries are used only when absolutely necessary thus maximizing available back-up time and extending battery life.
Rating: 600VA and 1000 VA
2. Automatic voltage regulation (AVR) to delivers stable voltage and provide higher availability.
3. Input Parameters
 - (i) Rated Voltage: 230AC Single Phase
 - (ii) Input Voltage Range: 145 to 280 VAC
 - (iii) Input Frequency: > 40 Hz auto-sensing 47-53 Hz, Generator Compatible
4. Smart charger to shorten battery recharging time
5. Output Parameters
 - (i) Output Voltage: 230 VAC Single Phase
 - (ii) Voltage Regulation on AC mode 200 to 245 VAC
 - (iii) Voltage Regulation on Battery mode $\pm 10\%$ or better
 - (iv) Output Frequency on battery mode: 50 Hz $\pm 1\%$
 - (v) On battery Wave Form: Simulated sine wave
 - (vi) Outlets: $\frac{3}{4}$ sockets universal
 - (vii) Transfer time: 4ms typical
6. Typical inbuilt SMF battery Backup time on: One PC: 15 minutes on 600 VA
: Two PC: 15 minutes on 1000VA
7. Battery start function when utility power is not present.
8. Audible alarms to provide status of UPS: Line failure, battery low and overload/ fault.
9. LED indicators provide the UPS status at a glance.
10. Automatic self test to ensure the battery condition.
11. Protection
 - (i) Overload, battery drain and battery overcharge protection
 - (ii) Short Circuit: AC mode – input fuse & electronics circuit
Battery mode – electronic circuit
 - (iii) UPS to provide 24/7 surge suppressor protection
12. UPS should be microprocessor based to provide higher reliability
13. Battery charging time: approx 6 hours recover to 90%
14. Environment: Operating Temperature 0-40° C
: Relative Humidity 95% maximum, non- condensing
15. Certification:
Safety: CE, TLC, UL
16. Warranty: On site comprehensive warranty for 2 years on UPS system & one year on battery.